

439 / Gift

CTE Publication

IN-SERVICE TEACHER EDUCATION PROGRAMME

Volume – I



**INSTITUTE OF EDUCATION FOR WOMEN
HASTINGS HOUSE**

(NCTE Recognised)

College of Teacher Education

**20B Judges Court Road
Kolkata – 700027**

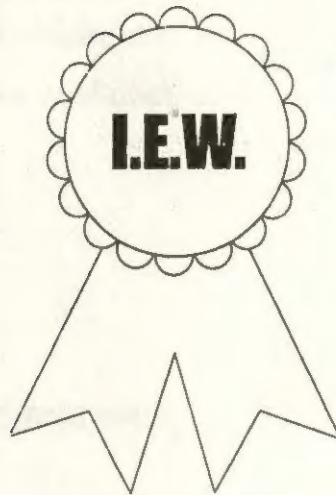


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CONTENTS

Preface

Prof. Nina Nandy

1

Phase - I

MATHEMATICS

Programme Schedule

গণিতে আগ্রহ সঞ্চারে কয়েকটি পদক্ষেপ	ডঃ গোপা দত্ত	7
Application of New Approach in Teaching Mathematics	Dr. Mili Das	11
Mathematics curriculum and Role of Mathematics Teachers as an Instructor	Dr. Bharati Banerjee	15
Growing Distaste and Phobia in Mathematics	Dr. Hitasish Bhowmik	20
IT Enabled Teaching	Dr. Samar Bhattacharya	23
List of Participants		

SANSKRIT

Programme Schedule

প্রধান অতিথির প্রতিবেদন : সঞ্চালিকার কলমে	অধ্যাপিকা গীতা মুখোপাধ্যায়	47
Co-ordinator's Report		49
সংস্কৃত পাঠ্যক্রম এবং পাঠ্যপুস্তক	অধ্যাপিকা গীতা মুখোপাধ্যায়	51
সংস্কৃতবিষয়ক	অধ্যাপক তন্ময় ভট্টাচার্য	56
সংস্কৃত-ভাষা শিক্ষণের নতুন শৈলী	ডঃ রুমা বন্দ্যোপাধ্যায়	73
সংস্কৃত-ভাষা শিক্ষার গ্রহণযোগ্য পদক্ষেপ	অধ্যাপিকা মঞ্জুলিকা রায়	75
সমাसेन सत्रविषयकम्	অধ্যাপিকা গীতা মুখোপাধ্যায়	77
“কিছু কথা”	অধ্যাপিকা গীতা মুখোপাধ্যায়	79
List of Participants		

ENGLISH

Programme Schedule		
Report of the Co-ordinator	Prof. Aparna Chakraborty	87
Summary of Inaugural Address	Prof. Ujjwal Kumar Basu	91
Teaching-Learning of English as Second Language :		
Teacher Education through Radio	Dr. Rathindra Nath De	93
Developing Reading Skills in the Classroom	Prof. Madhuri Dasgupta	101
Teaching Writing Skills at the Secondary level	Prof. Sanghita Sen	105
Developing Aural-Oral Skills	Prof. Saktipada Patra	110
Sample Lesson Plans		114
List of Participants		
Appendix : Worksheet – 21		118

Phase - II

Programme Schedule		
Introductory Speech at NCF – 2005	Dr. Alpana Munshi	129
Key Note Address	Prof. Rajyasri Roy	130
National Curriculum Framework, 2005	Prof. Ranju Gopal Mukherjee	132
Constructivist Learning Situation	Dr. Subhalakshmi Nandi	135
Rethinking on Music Education in Tagorean Lines	Dr. Sitansu Ray	139
National Curriculum Framework :		
Assessment and Evaluation Procedure	Dr. Debjani Sengupta	145
Curriculum Without Burden	Dr. Rita Sinha	149
Curriculum Renewal for Teacher Education	Prof. Tapas Kumar Mitra	150
Value of Interaction	Dr. Jayasri Banerjee	155
Participation for All Children	Prof. Kausik Chatterjee	159
A Brief Report on National Curriculum Framework – 2005	Dr. Smriti Kana Majumdar	162
Seminar on N C F – 2005 : Participants' opinion		165
List of Participants		

PREFACE

In the words of Robert Oppenheimer "Knowledge rests on knowledge: what is new is meaningful because it departs slightly from what was known before".

A teacher of the present century has to keep pace with the knowledge explosion of the century. He or she has always to refresh his or her knowledge, change the attitude and outlook with the modern phase of life. In service education is a process of developing the teacher's competency, making the teacher aware of the recent trends in education.

It is a great pleasure for us that our Institution had the privilege of organizing Orientation Programmes for In-service school teachers and a Seminar on 'National Curriculum Framework 2005' for Teacher Educators, under CTE scheme sponsored by Ministry of Human Resource Development, Government of India. The thoughts of these programmes could be put into practice due to the co-operations received from the officials of Department of Higher Education, Education Directorate West Bengal and the Director SCERT, West Bengal. We express our heartiest gratitude to them.

The Faculties of this premier Institution, with all their experiences and wisdom, enlightened the spirit of these in-service training programmes so as to bring about quality improvement both in school and teacher education.

NINA NANDY
Officer-in-Charge



Participants and Resource persons at the Mathematics Workshop with Coordinator



Group Activity – Mathematics Workshop (Demonstration)



Participants and Resource Persons at the Sanskrit Workshop with Coordinator



Group Activity – Sanskrit Workshop (Demonstration)



Inaugural Programme – English Workshop



Group Activity – English Workshop (Demonstration)

MATHEMATICS

PROGRAMME ON 22-05-2006

- 10-30 – 11.00 a.m. : Registration
- 11-00 – 11-05 a.m. : Introduction – Dr. Sujata Raha
- 11-05 – 11-15 a.m. : Welcome Address by Prof. Nina Nandy
- 11-15 – 11-20 a.m. : Inauguration by Chief Guest
Dr. Gopa Dutta, President, W.B. Council of Higher Secondary Education.
- 11-20 – 11-30 a.m. : Objective of the Programme Dr. Mili Das
- 11-30 – 11-45 a.m. : Presentation of Mathematics Laboratory.
- 11-45 – 12-00 Noon : Address by Chief guest.
- 12-00 – 12-10 p.m. : T E A B R E A K
- 12-10 – 12-40 p.m. : Lecture on :
Mathematics Curriculum and Role of Mathematics Teacher as an Instructor by
Prof. (Dr.) Bharati Banerjee. Ex-Teacher-in-Charge Sri Sikshyatan College. B.Ed.
- 12-40 – 01-20 p.m. : Lecture on :
Reasons for growing distaste and Phobia in Mathematics and its possible remedy. by Dr. Hitasish Bhowmik, Reader; R. K. M. Sikshan Mandir, Belur.
- 01-20 – 02-00 p.m. : Lecture and Presentation on Role of Digital Technology in Teaching Mathematics by Dr. Samar Bhattacharyya. Professor, Department of Electrical Engineering, Jadavpur University.
- 02-00 – 02-10 p.m. : Interaction with speakers.
- 02-10 – 02-30 p.m. : LUNCH BREAK
- 02-30 – 02-40 p.m. : Visit to Mathematics Laboratory
- 02-40 – 04-00 p.m. : Group Activity
- a) Each Group will select a topic and prepare teaching aid for teaching the topic in Class-room situation.
- b) The topic will be chosen for Secondary Syllabus of W.B.B.S. Edn.
- 04-15 – 04-30 p.m. : TEA BREAK
- 04-30 – 05-00 p.m. : Brief discussion on teaching aids.

PROGRAMME ON 23-05-2006

11-00 – 12-00 Noon : Group Activity Continued :

- a) Each group will prepare a write-up on their own topic, mentioning the steps of using the teaching aids.

12 noon 12-15 : TEA BREAK

- 12-15 – 02-00 p.m. :
- a) Presentation by each group on their activities.
 - b) Experts comment.

02.00 – 02-45 p.m. : LUNCH BREAK

02-45 – 05-00 p.m. : Valedictory Session

- a) Co-ordinator's Address
- b) Distribution of Certificate
- c) Vote of Thanks.

গণিতে আগ্রহ সঞ্চারে কয়েকটি পদক্ষেপ

ডঃ গোপা দত্ত

সভাপতি

পশ্চিমবঙ্গ উচ্চ-মাধ্যমিক শিক্ষা সংসদ

মাননীয় অধ্যক্ষা, উপস্থিত মাননীয় বক্তারা, আমার সহকর্মী অধ্যাপিকারা ও সরকারী প্রতিনিধি যাঁরা উপস্থিত আছেন, সবাইকে নমস্কার জানাই। উপস্থিত ছাত্রীদের জানাই আমার ভালবাসা।

এই অনুষ্ঠানে আসতে পেরে আমার খুব ভাল লাগছে। আমি ধন্যবাদ জানাই এই কলেজের অধ্যক্ষা নীনা নন্দীকে ও অধ্যাপিকাদের। যদিও আমি এই অনুষ্ঠানের বক্তা হিসাবে নিজেকে যোগ্য মনে করি না। কারণ আমিতো গণিতের মানুষ নই। আমি সাহিত্য পড়াই এবং নিজেকে এখনও সাহিত্যের ছাত্রী বলে ভাবি। তবে গণিত আমি পড়েছি, যদিও বেশি দূর অবধি নয়। এখন সংসদে যেখানে আছি আগে কলেজে ছিলাম, বিশ্ববিদ্যালয়ে পড়িয়েছি, সব জায়গায় দেখেছি, গণিত নিয়ে সমস্যা আছে। সুতরাং গণিত সম্পর্কে দু-চার কথা বলতে পারব। তবে এ নেহাতই একজন সাধারণ মানুষের কথা বা সাধারণ শিক্ষিকার বক্তব্য এবং অভিজ্ঞতা।

প্রথমে বলি, গণিতের উপর যে সিডিটি দেখালেন সেটি অসাধারণ। ছাত্র-ছাত্রীদের গণিত-ভীতি দূর করতে হবে, সিডিটিতে তার চেষ্টা করা হয়েছে। একথা সত্যি ভাষা এবং গণিত দুটি যেকোনও শিক্ষার মূল ভিত্তি, —এ দুটি শিখতেই হবে। আজকাল মাঝে মাঝে একটা কথা শুনি যে, যারা অঙ্ক পারে না, তাদের অঙ্ক করার দরকার কি? —ছেড়ে দিলেই হয়। কিন্তু এটা খুব ভুল ধারণা, একেবারেই ভুল কথা। আমরা এই ভাবনা সমর্থন করি না, আমার মনে হয় এখানে যাঁরা উপস্থিত আছেন তাঁরাও অনেকে করেন না। কারণ হিসেবে একটু পিছু হাঁটা যাক, আমরা একটা পদ্ধতির মধ্যে দিয়ে পড়াশোনা করেছিলাম। পুরনো উচ্চ-মাধ্যমিক— আমাদের সময় অষ্টম শ্রেণীতে ধারা ভাগ করে দেওয়া হত অর্থাৎ যারা বিজ্ঞান নেবে তারা বিজ্ঞান শাখা, যারা কলা বিভাগে থাকবে তারা কলা শাখার ছাত্র এবং যারা বাণিজ্য বিভাগ তারা বাণিজ্য শাখার ছাত্র। তারা পরে আর অন্য শাখায় যেতে পারত না।

এখানে আগের উচ্চ-মাধ্যমিক উত্তীর্ণ কারা আছেন জানি না, তবে যাঁরা আমার মত ঐ পদ্ধতির ভেতর দিয়ে গেছেন, তাঁরা এই stream ভাগ করে দেওয়ার বিষয়টি জানেন। তার ফলে আমরা আর অঙ্ক পড়তে পারিনি। অঙ্ক কখনই অষ্টম শ্রেণীতে শেষ হওয়া উচিত নয়। এখানে এই নিয়ে অনেক বিতর্ক হবে, কারণ আপনারা ওই যেকথা প্রথমেই উল্লেখ করেছেন ‘গণিতে ভয়’। গণিত সম্পর্কে একটা প্রচণ্ড ভয় ছাত্র-ছাত্রীদের মনে বাসা বেঁধে আছে। সবচেয়ে বেশি ভয় তারা পায় অঙ্ক পরীক্ষার দিন। এটা যেকোনও স্কুল পরীক্ষার ক্ষেত্রে সত্য। আমার মনে আছে যে উচ্চ-মাধ্যমিকে অঙ্ক পরীক্ষার দিন কী পরিমাণ সতর্কতা অবলম্বন করতে হয় গার্ড দেবার সময়। দ্বিতীয় কথা বলি— এ কথাও সত্যি গণিত পরীক্ষার পর আগ্রহতার পরিসংখ্যান ফেলে দেওয়ার মত নয়। এত ভয় যে তারা জীবনটাকেই শেষ করে দেওয়ার কথা ভাবছে। কিন্তু কেন এ রকম হবে? সত্যিই কি গণিত এরকম অসম্ভব কঠিন দুর্ভাগ্য একটা বিষয়? এই ভীতির সঙ্গে সংগ্রাম করবার জন্যই বোধ হয় গণিতের শিক্ষিক-শিক্ষিকাদের তৈরি হতে হবে।

আমি বলব যে, ইনস্টিটিউট অব এডুকেশন ফর উইমেন, হেস্টিংস হাউস এখানটায় পথ দেখাচ্ছেন। এই যে তাঁরা ওয়ার্কশপের আয়োজন করেছেন, এখান থেকেই গণিত-ভীতি দূর করার আসল পদ্ধতিগুলি নির্ণীত হবে। এই পদ্ধতি আপনারা শহর এবং গ্রামের বিভিন্ন স্কুলে ছড়িয়ে দিতে পারেন, এই আশা নিয়ে আমরা থাকব। আপনারা আরও অনেক কর্মশালা করুন এই নিয়ে আরও কাজ করুন, বিভিন্ন জায়গায় এটা করে এই ধরনের গবেষণাগার গড়ে উঠুক, যাতে ছাত্র-ছাত্রীরা এই সুবিধেগুলো পায়। যা আজকে আমরা মিলি দাসের বক্তৃতা থেকে বুঝতে পারলাম, যে গণিতকে ছাত্র-ছাত্রীদের কাছে আকর্ষণীয় করে তোলা, ভয় কাটিয়ে দেওয়া এবং গণিতের বাস্তব পদ্ধতি ও প্রয়োগ সম্পর্কে ছাত্রীদের সচেতন করে তোলা খুব দরকার।

আপনাদের অনুমতি নিয়ে দু-একটি ব্যক্তিগত কথা বলি। আমি অঙ্ককে খুব ভয় পেতাম। মনে আছে, আমি মাঝে মাঝে স্বপ্ন দেখতাম যে, পরীক্ষার হলে গেছি এবং কিছু পারছি না, বিষয়টা অবধারিত অঙ্ক। মনে আছে স্বপ্ন দেখছি আমাকে একটা সরল অঙ্ক দেওয়া হয়েছে, তার উত্তর আসছে $162\frac{1}{3}$, সরলটার উত্তর হয়ত হবে ০ বা ১। এই ভয়টা আমি অনেকদিন পর্যন্ত পেয়েছিলাম। আমার মত এখানে হয়ত অনেকেই আছেন। আমি কিন্তু ক্লাসে মোটামুটি ভাল ফল-ই করতাম, কিন্তু অঙ্ক বিষয়টা আমার কাছে কঠিন মনে হত। আমার খুব সৌভাগ্য যে ক্লাস সেভেনে আমি একজন মাস্টারমশায়ের কাছে পড়ার সুযোগ পাই যিনি বুঝিয়ে দিলেন, ভয়ের বিষয় নয় এটি ভারি চমৎকার একটা বিষয়। এই বিদ্যা শেখায় যুক্তি, চিন্তা, শৃঙ্খলা; পরিচ্ছন্ন একটা বোধের জায়গা তৈরি করে, যা যে কোনও বিষয় অধিগত করার সময় কাজে লাগবে। অঙ্কের ভিত্তি না থাকলে যে কোনও বিষয় পড়ার ক্ষেত্রে অসুবিধা হতে বাধ্য। অঙ্ক আমাদের যুক্তিবোধকে, চিন্তা পদ্ধতিকে, আমাদের চিন্তা-শৃঙ্খলাকে পরিচ্ছন্ন করে, যার খুব দরকার। অঙ্ক মানুষকে এমন একটা জায়গায় নিয়ে যেতে পারে, এমন rationality তৈরি করে, যা অন্য কোনও বিষয়ের মাধ্যমে হয় না। প্রথম একটি শিশুকে আপনি কী শেখাবেন? ভাষা এবং অঙ্ক অবশ্যই এই দুটি বিষয়। আমার সপ্তম শ্রেণীর সেই মাস্টারমশায়ের কথা মনে পড়ে গেল যিনি আমাকে অঙ্ক ভালবাসতে শেখালেন। আমি খুব ভালভাবে পড়ে অঙ্কে ভাল ফল করলাম। সপ্তম ও অষ্টম দুটি ক্লাসেই অঙ্কে ভাল ফল হওয়ার ফলে বিজ্ঞান পড়ার সুযোগ পেলাম। কিন্তু বাড়িতে সবাই বললেন, “না, তুমি কলা বিভাগের মেয়ে, বিজ্ঞান তোমার ভালবাসার বিষয় নয়, তুমি বিজ্ঞান নিও না, কলা বিভাগে যাও”। তাঁরা ঠিক বলেছিলেন, আমি ঠিকই করেছি কলা বিভাগে এসে। কিন্তু আমি বলছি সেই শিক্ষকের অবদানের কথা একটি ছাত্রী যে অঙ্ক ভয় পাচ্ছে, যে সরে থাকছে, আর সরে থাকলেই কি হয় অঙ্ক করতে ইচ্ছা করে না, আস্তে আস্তে বিষয়টির সঙ্গে অসীম দূরত্ব তৈরি হয়, সেই ছাত্রীকে শিক্ষক নির্ভয় হতে শেখালেন।

এক শ্রেণীর শিক্ষক আছেন, যাঁরা প্রথমে ক্লাসে এসেই যে সমস্ত ছাত্র অঙ্কে দুর্বল তাদের সঙ্গে সঠিক ব্যবহার করেন না। একটি শ্রেণীতে হয়ত পঞ্চাশ জনের মধ্যে চল্লিশ জনই অঙ্কে দুর্বল, কিন্তু তারা নির্বোধ নয়, ওদের হয়ত বিষয়টি ঠিকমত শেখানো হয় নি। তারা হয়ত বাকি দশ জনের মত অগ্রসর নয়। কিন্তু দেখা যাবে সঠিক পদ্ধতিতে (যেমন আমরা সিডিতে দেখলাম জ্যামিতি পড়ানোর পদ্ধতি) না পড়িয়ে বলা হচ্ছে, “তোর মাথায় কিছুই নেই, তোর অঙ্ক হবে না, যা অন্য বিষয় (বিষয়ের উল্লেখ করতে চাই না, অনেকে দুঃখ পাবেন, আমিও হয়ত পাব) পড়তে যা”। আমি ব্যক্তিগত অভিজ্ঞতা থেকে বলছি, আমি একজন শিক্ষিকাকে দেখেছি, যিনি

ক্লাসে এসেই ‘বাড়ির কাজের খাতা’ দেখতে চাইতেন যারা আনেনি বা করেনি তাদের ক্লাস থেকে বার করে দিতেন। তারা সারি দিয়ে ক্লাসের বাইরে দাঁড়িয়ে থাকত। বাকি বাছাই-করা ভালো ছাত্রীদের পড়িয়ে তিনি চলে যেতেন— এটা কী শিক্ষাদান হল? এইভাবে তিন-চার দিন যাওয়ার পর বাড়িতে চিঠি গেল অভিভাবকদের কাছে, “আপনাদের ছেলে-মেয়েরা পড়াশোনা করছে না, ছাড়িয়ে নিয়ে যান”। এটা কী ধরনের পদ্ধতি হল? আমি তো বলব ছাত্র-ছাত্রীরা যে বিষয়ে দুর্বল বা কাঁচা সে বিষয়ে তাকে আলো দেখানো, পথ দেখানো, হাত ধরে এগিয়ে আনাই শিক্ষকের কাজ। যে ছাত্র অঙ্কে ভাল, ৯০ শতাংশ পায় তাকে ৯৫ শতাংশ পাওয়ানো বড় কৃতিত্ব, নাকি যে ২৫/২০/১৫ পাচ্ছিল তাকে ৪০ পাওয়ানো— কোনটা বড় কৃতিত্ব? আমি তো বলব যে শিক্ষক ২০/১৫ পাওয়া ছাত্রকে ৪০ পেতে সাহায্য করবেন, তিনিই প্রকৃত শিক্ষক। তিনি একজন মানুষকে দুর্বল জায়গা থেকে আত্মবিশ্বাসের জায়গায় পৌঁছতে সাহায্য করেন। আমি বলব না সবাই অঙ্কে দুর্দান্ত হবে, কিন্তু অঙ্কে বোধের জায়গাটা ছাত্র-ছাত্রীকে প্রচণ্ড আত্মবিশ্বাস দেয়। পরবর্তীকালে সব বিষয় পড়বার সময় অঙ্কের এই জ্ঞান খুব কাজে লাগে।

সংসদের কাজে এদিক-ওদিক যেতে হয়। সম্প্রতি সংসদের একটা কাজে দিল্লিতে NCERT-তে দেখলাম একটা আশ্চর্য বিষয় নিয়ে আলোচনা হচ্ছে। সবাই বলছেন সারা ভারতবর্ষে দুটি বিষয় নিয়ে বড় সমস্যা। আপনাদের বলে দিতে হবে না, সে দুটি বিষয় হচ্ছে গণিত এবং ইংরেজি। সারা ভারতবর্ষের সমস্যা এই দুটি বিষয়ে ছাত্র-ছাত্রীদের ব্যাপক অসামর্থ্য। এটা অস্বীকার করার জায়গা নেই। আমাদের গরীব দেশ, এখানে পড়াশোনার সুযোগ কম। গ্রামের বা অনুন্নত অঞ্চলের স্কুলগুলোতে ছাত্র-ছাত্রীরা অঙ্ক ও ইংরেজিতে সঠিকভাবে তৈরি হতে পারে না এবং এর জন্য তারা বোর্ড পরীক্ষায় আটকে যায়। এটা সত্য, এই সত্যকে কেউ অস্বীকার করতে পারে না। এবার তার প্রতিকার কি? ওখানে অনেকে বললেন, তার সমাধান সূত্র হচ্ছে ইংরেজি এবং অঙ্ক দুটি স্তর তৈরি করা হোক— একটা উন্নত স্তর (advanced level) আর অন্যটা সাধারণ বা নিচের স্তর (comparatively lower level)। আমি দেখলাম অনেকেই এই ব্যবস্থায় মত দিচ্ছেন। তাদের মনে হচ্ছে এটা ভাল পদ্ধতি। এটা ভাল পদ্ধতি কেন? কারণ এর মাধ্যমে বোর্ড পরীক্ষায় পাশের হার বেড়ে যাবে। যে কোনও বোর্ড পরীক্ষায় ৬৫/৭০/৮০ শতাংশ পাশ করে, আর ৩০/২৫/২০ শতাংশ ফেল করে। সেটাকে অনেকটা তুলে আনা যাবে। কিন্তু এই দুই স্তরের ব্যাপারটা কি মেনে নেওয়া যায়? এখানে কিন্তু ভাবার অনেক ব্যাপার আছে। ইংরেজির জন্যও দুটি স্তরের কথা ভাবা হচ্ছে। আমার মতে এটা ঠিক পদ্ধতি নয়। আমরা তো জানি পৃথিবী-বিখ্যাত বহু বিজ্ঞানী গ্রাম থেকে উঠে এসেছেন, আমাদের দেশেও এসেছেন— মেঘনাদ সাহার কথা ভাবুন। তিনি কোন জায়গা থেকে উঠে এসেছিলেন। যেগুলো গ্রামের গরীব স্কুল সেখানে যদি সর্বদা দ্বিতীয় তরলীকৃত পদ্ধতিতে পড়ানো হয়, তবে আমরা কি ভবিষ্যতের মেঘনাদ সাহাদের আটকে দেব না! মেঘনাদ সাহা তো কলকাতা শহরের ঝাঁ চক্চকে স্কুলে পড়েন নি। বিষয়ের দুই স্তর সমাজে অনাকাঙ্ক্ষিত দুই স্তর তৈরি করবে— আমরা কেন সেটা করব? আমরা বরং চেষ্টা করি এই স্তরটিকেই সহজ করে সকলের কাছে কিভাবে পৌঁছে দেওয়া যায়।

তাই আপনাদের এখানে এসে খুব ভাল লাগছে যে, আপনারা অঙ্কে আকর্ষণীয় করে তুলতে, গণিত-ভীতি কাটাতে, কার্যকরীভাবে একটা জায়গায় যেতে চান। এটা খুব দরকার। আপনারা এটা আন্তরিকভাবে করুন।

আমি আন্তরিকভাবে চাই আপনারা সাফল্যের সঙ্গে এগিয়ে যান। কলেজ-বিশ্ববিদ্যালয় নয়, সকলেই জানে আসল পড়াশোনার ভিত্তি তৈরি করে স্কুল। স্কুল যদি একটা মানুষকে তৈরি না করে, তবে পরে আর হয় না। গোড়া তৈরি করে স্কুল, কাজেই স্কুলে যদি অঙ্কের ভিত্তি তৈরি না হয়, পরে আর কখনই হয় না। পরে হঠাৎ করে কলেজে গিয়ে অঙ্কে ভাল হয়ে গেল, আমি তো এরকম দেখিনি। আপনারা দেখেছেন কি-না জানি না। কলেজে গিয়ে কোন বিষয়ের প্রতি নতুন করে আকর্ষণ জন্মানো কমই দেখা যায়।

বেশীর ভাগ বিষয়ের প্রতি আকর্ষণ জন্মায় সপ্তম শ্রেণী থেকে। ষষ্ঠশ্রেণীতে শিক্ষার্থীরা ছোট থাকে। সপ্তম থেকে বিষয়গুলি ভালভাবে ধরতে শেখে। আমি জানি না ঠিক বলছি কি-না। হয়ত আপনাদের শিক্ষাবিজ্ঞানে এ বিষয়ে অনেক চর্চা জায়গা আছে। কিন্তু স্কুলেই এই ভালবাসার ব্যাপারটা তৈরি হয়, স্কুলেই এর ভিত্তি স্থাপন এবং ভীতি দূর হয়। এই যে ভীতি এখনও দেখছি অঙ্ক পরীক্ষার আগে ছাত্র-ছাত্রীদের শরীর খারাপ হয়, মাথা ব্যথা হয়, অনেকেই ফিট হয়ে যায়। বাবা-মা বকাবকি করছেন ভাবছেন মাস্টার-মশাই রেখে দিয়েছেন তাতেই হবে। সুতরাং এই জায়গা থেকে বেরোনোর একমাত্র উপায় এইরকম ব্যবহারিক পদ্ধতিতে অঙ্ক শিখিয়ে ভয়টাকে কাটিয়ে দেওয়া। তবে ছাত্র-ছাত্রীদের মধ্যে শ্রেণী বিভাগ থাকবেই। সবাই একরকম ভাল হতে পারে না। আজকাল অভিভাবকেরা মনে করেন সবাই কেন একশতে একশ পায় না— এটা হবে না। কারণ কোন বিষয়ে কারও কারও স্বাভাবিক একটা দক্ষতা থাকে। কিন্তু আমাদের ইচ্ছে ভালরা আরও ভাল হোক, মাঝারিরা আরও উঠে আসুক এবং যারা খারাপ করছিল তারা মাঝারি ভাল করুক— এইভাবে ধাপে ধাপে তাদের তুলে আনার চেষ্টা চলুক। আপনারা Institute of Education for Women এব্যাপারে পথিকৃ্তের ভূমিকা নিয়েছেন— আমি আপনাদের অভিনন্দন জানাই।

(ইন্সটিটিউট অফ এডুকেশন ফর উইমেন, হেস্টিংস হাউস—

সি. টি. ই. প্রোগ্রামে দেওয়া বক্তৃতা)

Application of New Approach in Teaching Mathematics

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- 1.1 National Council for Teacher Education (NCTE) has selected four Teachers Training Colleges in West Bengal as College of Teacher Education (CTE) to introduce in-service training for the teacher of secondary schools. The primary objectives of this in-service training is to refresh & blend the old experiences of secondary school teachers with new concepts of quality education & need based education which is the demand of to days learners as well as the society's to a teacher. Institute of Education for Women (IEW) Hastings House Kolkata is one of the four institutions where this program has been offered. College of Teacher Education (CTE) program was initiated in IEW in their Golden Jubilee Year 2004, 22nd February. But it has been materialized in May 2006 due to some inconveniences. Keeping an eye to the over all objectives of CTE we have set objectives of our CTE program in each subject. The objectives of this course was set to brush up teacher participant's knowledge of teaching who are still following traditional methods in the class teaching & to acquaint them with new methodology of teaching to provide quality education to their students so that they can meet the challenges of new era. To this context the action plans on three subjects such as Mathematics, English & Sanskrit were developed by a group of teacher educators of IEW; Hastings house; Kolkata.
- 1.2 The teachers of IEW first organized a two days Workshop cum Orientation Programme under CTE for Secondary School Teachers on Mathematics, on 22nd & 23rd May 2006. Author was the coordinator of this program. The theme as well as topic of the programme was "Improvement of Teaching Mathematics in secondary school using Mathematics Laboratory".
- 1.3 **The Objectives:**
 - a) To enumerate the relationship between curriculum and methodology of teaching, and teachers, because only the proper amalgamation of these factors can create an amicable environment for learning mathematics in the classroom.
 - b) To emphasis the reasons of growing distaste and phobia among secondary Students in learning mathematics, and to discuss certain positive ways of teaching this subject, which would help in removing the aversion.
 - c) To expose our participant teachers to new concepts of teaching and learning approach in mathematics, using Information Technology (IT), which is a Part of our Maths-Lab.
- 1.4 **Background of selection of the theme:**

Every year we the teacher educators have a scope to visit quite a number of secondary schools during practice teaching period. At this period I supervise a

large number of mathematics classes which are taught by our trainee students (teachers & would be teachers) in different levels between VI-IX standards. In these classes I have observed some interesting points in connection with the students responses & keenness in the teaching learning process. This is not the usual scenario in the regular mathematics classes in a school. Students hardly interact with their teacher in a mathematics class. My observation is that dynamic presentation, which comprises use of model, charts, life oriented examples, experiments, use of technology to explain some new concepts repetitively in teaching mathematics is a very effective approach. This approach what our trainee students try to apply in the class teaching with which normally students of many ordinary secondary schools are not familiar. It seems students get interest being taught by this dynamic method & motivated to learn mathematics. This type of skills & concepts in teaching mathematics is possible to develop through the experience of mathematics laboratory together with theoretical classes of methods of teaching mathematics. This dynamic approach in teaching mathematics is still at its infant stage to apply in a class at the school level in our state. The dept. of mathematics, IEW is trying to develop this skill in their trainee students through their recently developed Maths-Lab. And our intention is to popularize the approach among the mathematics teacher of secondary schools. Out of this motivation the theme has been chosen for the orientation program cum workshop on mathematics for the secondary teachers.

- 1.5 The Department of Mathematics; IEW, Hastings House, Alipore recently develop a Mathematics Laboratory. The concept & use of mathematics laboratory is new to our participants and guests. So to give an idea about Maths-Lab instruments and its use a CD is presented & demonstrated on 'How the maths-Lab can be effectively used to make mathematics teaching-learning attractive & effective'. The emphasis is given on mainly the topics of Algebra, Geometry & Mensuration from VI to X. Every model and experiment are developed in such a manner that trainees would be able to understand its configuration, relation with the topic, and trainees are provided with the experience when & how the model can be used. At the same time he/she would be have the scope to prepare models, to set experiments etc., to develop presentation using CD etc.

A brief description of the preparation of teaching aids/models have shown which can be prepared by folding & cutting papers in the classroom involving pupils.

The objective of this visual presentation of the mathematics-laboratory through CD was arranged to motivate & make our participants familiar with the use of IT in the classroom. Another intention was to develop awareness about the perfect use IT as teaching aids.

For example in proving the formula 'square of sum of two numbers', which is actually a square having each side equal to the sum of the respective numbers. A teacher can prove & justify the formula changing the position of the square on the screen as well as can ask her students to participate in recapitulation stage.

1.6 Comment's of Chief Guest

After watching the CD on Maths-Lab our chief guest Dr. Gopa Dutta President, W. B. Higher Secondary Council, appreciated the approach in achieving the goal of the workshop. She also praised the use of Maths-Lab in teaching learning system to reduce the phobia in learning mathematics. She also mentioned that this practical based approach in teaching mathematics is the only solution to develop taste of learning mathematics in the little learners. She advised us to conduct more workshop & seminars on this context. As a pioneer institution in developing such an approach, she expects IEW will take the initiation to spread the modern teaching approach involving mathematics teachers of secondary schools in urban & rural sectors of West-Bengal.

2.1 Topics discussed by our experts.

We invited three experts from different college & universities to deliver lectures on related concepts.

Our honourable speakers and their topics of discussion were :

1. Prof. Bharati Banerjee, ex-teacher in charge, B.Ed. Section; Shri-Shikshayatan College, She delivered lecture on 'Mathematics Curriculum and Role of Mathematics Teachers as an Instructor'.
2. Prof. Hitasish Bhowmik, Reader in Mathematics, Belur Ramkrishna Bidyapith College, His topic of discussion was 'Growing Distaste and Phobia in Mathematics'
3. Dr. Samar Battacharya, Professor, Department of Electrical Engineering, Jadavpur University.

His area of discussion was 'IT Enabled Teaching'

Note: the detail of the lectures will be furnished in full paper form at the end of this section.

- 2.2 Our target group was Assistant Mathematics Teachers of Secondary Schools. We have invited ten mathematics teachers from the five secondary schools of Kolkata.

Group performance for participants was set in the light of the above-mentioned objective. The detail group work performed by the participants is as follows.

❖ Plan adopted for Group Work :

We had 10 participants who are assistant mathematics teachers from different Secondary schools of Kolkata.

- a) The Participants were divided into 5 groups.
- b) Each group were directed to select a topic/unit from the secondary syllabus & prepared suitable teaching aids that would serve the purpose of her teaching in the class.

v

- c) They were also asked to prepare a write-up on 'How & when' the teaching aids would be presented/used in her class during teaching.
- d) The write-up will be submitted to our evaluators on the second day of the workshop i.e. 23.05.2006.
- e) Each group demonstrated their teaching aids how they would use it in the process of teaching learning ?
- f) The evaluations Prof. Bharati Banerjee & Prof. Hitasish Bhowmick supervised the work of each group and their presentation. After presentation each group has been criticised by our evaluators. Experts also gave suggestion to our participants for better performance.
- g) Each participant was honoured with a certificate.

2.3 Few points were mentioned for teachers to remember:

- a) Teacher should always try to gauge the level of understanding of their students.
- b) Teacher should know more than the subjects she/he is going to teach.
- c) Teacher should figure out how to stimulate productive thinking
- d) Teacher should keep the topic as free of abstraction as possible; in this context, especially–
 - i) Keep the presentation simple.
 - ii) Present the topic in real, life-oriented examples and contexts, so as there is a real interest among the students.
 - iii) Get, evaluate, and use the latest technology as a teaching and learning tool.

As students will go on to face challenges in life; their education should be one that helps them face these challenges with elan. The emphasis of this teaching methodology is qualitative education. More over Mathematics teacher should have the confidence that s/he will be able to motivate all students to learn mathematics. And a maths-teacher would not never bear in mind the feeling that mathematics is only for the best & brightest.

2.4 Feedback from Participants

- 1) They appreciated the techniques of use of teaching aids in classroom teaching through mathematics laboratory.
- 2) They think that teachers would be more benefited if this type of program is arranged at least twice in a year.
- 3) Teachers are interested to develop Maths-Lab in their schools.

The C.T.E. program was possible to organise successfully for methodical guidance from Prof. Nina Nandy; Officer-in-Charge & heartiest cooperation of professors and office-staff of Institute of Education for Women; Hasting House. Thank you all.

Mathematics curriculum and Role of Mathematics Teachers as an Instructor

By

DR. BHARATI BANERJEE

I convey my sincere thanks to Prof. Nina Nandy and Dr. Milli Das, Institute of Education for women, for inviting me, to be a part of the orientation programme for inservice secondary mathematics teachers on "Improvement of Mathematics Teaching", through Mathematics laboratory, organized by CTE, Institute of Education for women.

The topic of my deliberation today is 'Mathematics curriculum and Role of Mathematics Teachers as an Instructor'. There are two aspects of this topic, which I have been entrusted to discuss. One is Mathematics curriculum and the other is role of mathematics teacher as an Instructor. Both the aspects are broad and interrelated, and as such, I am little hesitant about my deliberation whether I will be doing justice to the topic, in this short span of time.

Mathematics is compulsory at school level. Schools are essentially a social organization. Societal values are manifested in the aim of the mathematics curriculum.

- a) The utilitarian aim – which concerns the acquisition of mathematical skills and achievement of mathematical functionality, which the students can utilize in their life and activities.
- b) The individual development aim – concerns the contribution of mathematics education, growth – development and towards general education of the children.
- c) The mathematical aim, concerns the transmission of mathematical knowledge. The communication of the academic discipline of mathematics of students.

Recent ideas about reform of school mathematics have formulated goals of teaching school mathematics is to become–

- i) mathematically literate
- ii) one capable of extending their learning
- iii) have an equal opportunity to learn
- iv) become informed citizens capable of understanding issues in a technological society.

The students goal are –

- i) They learn to value mathematics
- ii) They become confident in their ability to do mathematics
- iii) That they become mathematical problem solvers.
- iv) That they learn to communicate mathematically
- v) That they learn to reason mathematically.

The curriculum depends on these goals and as such Instructional purposes and procedures also.

By curriculum, we mean an operational plan for instruction that details what mathematics students need to know, how students are to achieve the identified current goal, what teachers are to do to help students develop their mathematical knowledge and the context in which learning and teaching occurs.

As our society is changing from Industrialized to information society, goals of teaching mathematics is being affected. The impact of technology has dramatically changed the nature of physical, life and social science, business, industry and government. Now availability of low cost calculator, computer, new electronic material etc. are no longer an intellectual abstraction – it is technology oriented and our mathematics programme is bound to experience these changes.

These shifts demand changes in curriculum. But we have to maintain the quality of curriculum with these changing facet or we need to promote quality. To maintain quality control of curriculum, we need proper planning on dual aspects. First, to maintain or to promote quality, we need good mathematics teachers, administrators allocating resources more equitably selecting better text books, providing mathematical journals, selecting contents which are essential to keep up with this changes, as well as providing for manipulative materials, mathematical laboratory for actively doing and new teaching learning process. Second phase is the design to keep quality control, changes are to be introduced to establish new goals, structures and finding new ways of solving problems.

To maintain the quality of curriculum –

- i) Curriculum should be conceptually oriented
- ii) Curriculum should actively involve children in doing mathematics – Necessity of establishing mathematics laboratory is essential.
- iii) Curriculum should emphasize the development of children's mathematical thinking and reasoning abilities.
- iv) Curriculum should emphasize application of mathematics. By applying mathematics, children learn Power of mathematics.
- v) Curriculum should be projected as integration of all the different branches of mathematics like arithmetic, algebra, geometry, probability, statistics, trigonometry etc., to show the usefulness of mathematics.
- vi) Curriculum should make appropriate and ongoing use of calculator and computer.

The thoughtful and creative use of technology can greatly improve both the quality of the curriculum and quality of children's learning. It is desirable to integrate calculators and computers into school mathematics. Students should learn to use the computer as a

tool for processing information and performing calculations to investigate and solve problems. Calculators enable children to explore number ideas and pattern to have valuable concept development.

But at the same time, we have to remember that access to these technology does not guarantee the students' concept development, understanding etc.

Beside, curriculum construction needs to consider developmental theories by Piaget, Dienes, Skemp, Bruner, Gagne, Ausubel and others, who have contributed to reform curriculum – both organization of content and methodology.

The above discussion – though very theoretical in nature, guide us to rearrange the mathematical content for our student. Some of the suggestions are –

- 1) Instead of routine problems solving questions on age, coin, etc., we have to pursue open ended problems, investigating and formulating questions from problems situation, representing situation verbally, numerically, graphically etc.
- 2) Patterns and functions should be included.
- 3) Instead of manipulative symbols, memorizing and drilling on equation solving, developing an understanding of variables, expression and equation are necessary. Equations are mathematical model, for different types of real problems, should be stressed.
- 4) Instead of learning isolated topics – connection of mathematics to other subjects are necessary. Mass, volume, measurement etc. are same for both mathematics and science. Symmetry, perspective, spatial relationship for Art, and so on.
- 5) For computation and graphs, provision should be made for using technology – including calculators, computers, videos, etc.
- 6) Provision for more use of manipulation materials, like – spinners, cubes, geoboards, graph paper, etc.
- 7) Use of statistics and probability.
- 8) Developing on understanding of geometrics objects and relationship – geometry for solving problem – not only memorizing facts and relationship
- 9) Inclusion of different base system like binary etc. and their relation with decimal system.
- 10) More extensive use of transformation geometry.
- 11) Use of geometrical model to develop spatial sense and relate geometric ideas to number and measurement ideas.

Second Point: Role of Mathematics Teachers as an Instructor.

As schools are essentially social institution, the teachers of mathematics are accountable to the society for the development of mathematical proficiency of the students. So as a professional what are the role of mathematics teachers as an instructor.

To teach mathematics in an intellectual honest and effective way, teachers have to make appropriate instructional decisions. Any mathematical instructional programme include teacher's attribute of teaching capacity, his/her perception of class room environment, his ability to choose mathematical task to make it meaningful, understandable and interesting.

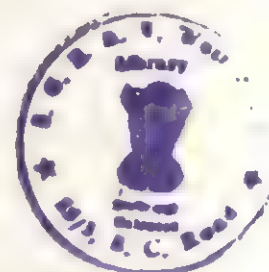
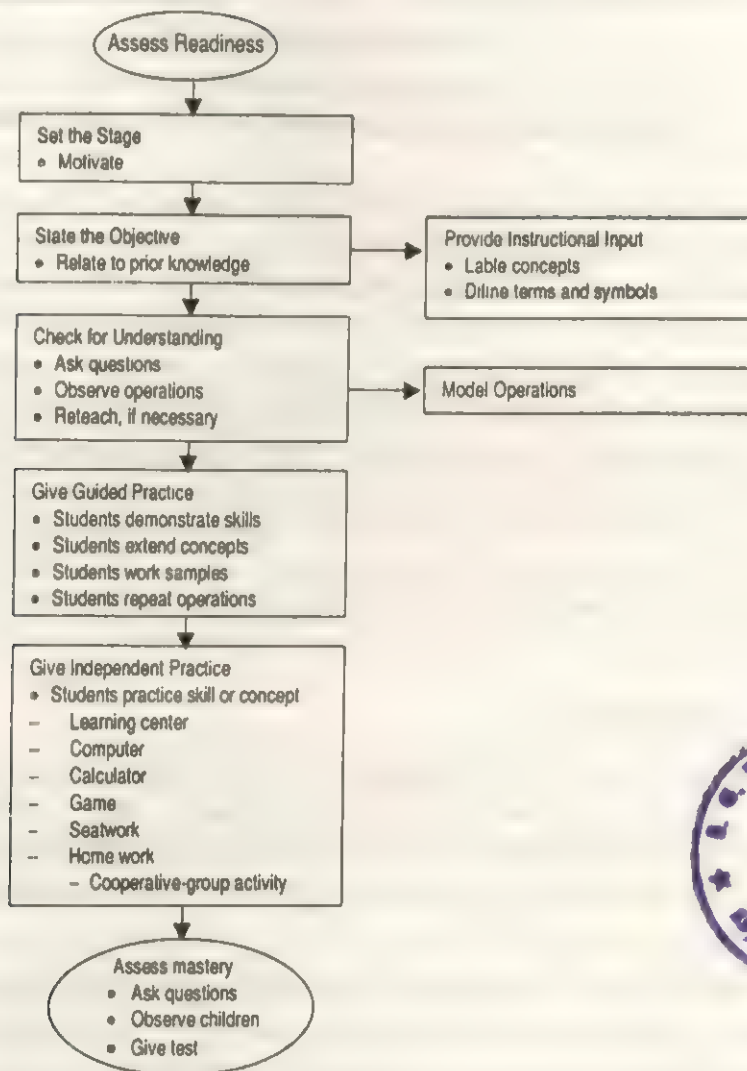
The mathematics teacher should make use of –

- i) Instructional material, with proper instructional objectives and resources including technology – use of mathematics laboratory.
- ii) Providing opportunities to inspire understanding of mathematical concept and its applications.
- iii) To promote investigational attitude.
- iv) To instill positive attitude towards maths and confidence in doing maths.

A well balanced mathematics programme should include informal exploratory activities, teacher directed lessons and mathematical investigation. Exploratory activities build back ground for formal instruction. 'Teacher directed lesson' give students structural experiences for learning concepts, procedures, terminology and skills. Following Robert Gagne's event of instruction, a lessons cycle developed by Hunter and Russell which have been used by many teachers in the U.S.A. The lesson cycle suggest seven points for an effective lesson–

- i) Set the stage
- ii) State the objective
- iii) Provide instructional input
- iv) Model operations
- v) Check for understanding
- vi) Model operations
- v) Check for understanding
- vi) Give guided practice
- vii) Give independent practice

Figure – Seven step lesson cycle



Today's discussion may seem to be very theoretical but underlying message make us more conscious about our efforts, deliberation and commitments for the students' learning

To implement the ideas about mathematics curriculum – we have to think the ways we permeate our decisions, to the students' community. Let us try for this in an honest way.

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3. NCTM : Curriculum and evaluation, 1989.

GROWING DISTASTE AND PHOBIA IN MATHEMATICS

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R. K. Mission Sikshanamandira, Belurmath, Howrah.

The term Mathematics has been interpreted and explained in various ways. Mathematics is one of the languages of human life and certainly no more marvellous language was ever created by the mind of man. Mathematics cut short the lengthy statements through its symbols, is free from verbosity, helps the expression of ideas in an exact form and enables to understand logic, sharpness, precision, brevity and beauty of mathematics. A good teacher loves the subject he is teaching. Teacher's negative feeling towards subject may affect the children. The mathematics teacher has a major responsibility in assisting pupils to learn in ongoing lessons and units of study. *Little children usually like numbers and math* – yet many kids in public school develop 'math anxiety or phobia' or end up disliking math. Math-anxious students complain of such things as nervousness, inability to concentrate, a blank mind, and a feeling of sickness when they are confronted with taking a math test.

Phobias in Mathematics :

The word phobia comes from the Greek word that means fear, panic, dread or fright. A phobia is a strong, persistent and unwarranted fear of some specific object or situation. Extreme anxiety of panic attacks often occurs when the individual encounters the phobic stimulus. Attempts to avoid the object or situation notably interfere with the individual's life.

Math phobia, which is exhibited by many students, is the persistent, illogical, intense fear of not succeeding in math. It is described as feeling of tension and anxiety that interfere with the manipulation of mathematical problems in a wide variety of ordinary life as well as academic situations. It is the belief that one is unable to handle the difficulty associated with learning students. Math phobia results from environmental factors, intellectual factors and personality factors. Many people incorrectly assume that math phobia and an inability to be successful in mathematics are inherited from one's parents. Several legitimate factors contribute to, and increase the severity of, this perception. For instance, gender and ethnic backgrounds are not determining factors in mathematical competence, but peer' and teachers' attitudes toward gender and ethnicity may increase one's confidence in mathematical skills. The methods used to teach mathematics skills may affect whether a student feels successful and develops mathematical self-confidence. Finally, family and peer attitudes may positively or negatively influence student's attitudes towards mathematics, which in turn affect their levels of confidence.

Unless someone is diagnosed with a specific learning disability associated with processing numbers or learning intuitive concepts, math phobia is not a permanent condition. Math phobia can be overcome with the patience of a experienced and enthusiastic teacher, parent, coach, or therapist. Once a person gains even minimal amounts of success with mathematical concepts, the anxiety usually abates.

Distaste in Mathematics :

Many students with difficulties in mathematics labelled as below average in mathematics. Some students who find mathematics challenging give up, believing that there is no way to develop their skills. Distaste in mathematics may be a cause of backward in mathematics. This distaste may either be natural or acquired. If it is inborn, the teacher's effort may go waste. But if it is an acquired one, it may be mostly the fault of teacher. If the teacher fails to develop a feeling of attachment between the student and himself, then the distaste for the subject occurs. Heaviness of the syllabus, toughness of the subject and difficulty of its problem also produce distaste.

Influence of the home may also create distaste. Some parents unintentionally give negative suggestions to their children. Some of them have a habit to say that failure in mathematics has been a tradition of their family or they never liked mathematics or they never pass in mathematics. These pronouncements are likely to have an adverse effect on the child's attainment in the subject.

Teacher's continuous inattention, non-seriousness, strictness and heavy punishment may also produce distaste in the subject among students. They start disliking the teacher and consequently the subject.

Students like newness and novelty. Repeated use of same method of teaching and teacher's most favourite method of teaching may result distaste in the subject.

Development of some doubts about the fundamentals of the subject among the students may produce distaste in the subject.

Mathematics needs special concentration. There may be some physical cause, such as poor eyesight, defect in hearing organ, digestive problem, headache or any other physical ailment, which does not allow the student to concentrate on his studies.

Possible Preventive and Reduction Techniques that will make Children feel more successful in Mathematics :

In order to make students feel more successful in mathematics we can implement following such prevention and reduction techniques:

1. The teacher must re-examine his teaching methods. He should give more emphasis on teaching methods which include less lecture, more discussion and students activity classes. Students learn best when they are active learners rather than passive learners.
2. Teachers can become more flexible when grading mathematics tests by checking the procedure instead of only checking the answer, as this gives the teacher an understanding of where the student needs help.
3. Assessment techniques other than tests can be used to give students a chance to demonstrate what they actually know. Some of these alternative techniques include oral work, observation, demonstration, re-testing with former test. Project work is also a good assessment tool.

4. Students must have a high level of success or a level of failure that they can tolerate. Therefore incorrect responses must be handled in a positive way to encourage students' participation and enhance students' confidence.
5. Students enjoy experimenting. To learn mathematics, students must be engaged in exploring, conjecturing and thinking rather than engaged in rote learning of rules and procedures.
6. Most children will master mathematical concepts and skills more readily if they are presented first in concrete, pictorial and symbols. For example manipulative are concrete objects used to teach a concept. By using manipulatives, pictures and symbols to model or represent abstract ideas, the stage is set for young learners to understand the abstractions they represent. Students enjoy the change from lecture and books and they are more inclined to explore with manipulatives and show greater interest in class-work.
7. Cooperative groups provide students a chance to exchange ideas, to ask questions freely, to explain to one another, to clarify ideas in meaningful way and to express feelings about their learning. These skills acquired at an early age will be greatly beneficial throughout their adult working life.

Conclusion:

In most of the students math phobia is not a serious problem. Math anxiety affects all of us at one time or another, but for all of us it is a barrier we can overcome. Therefore, teachers must re-examine traditional teaching methods which often do not match students' learning styles and skills needed in society. Lessons must be presented in a variety of ways. For instance, a new concept can be taught through play acting, cooperative groups, visual aids, hands on activities and technology. As a result once young children see math as fun, they will enjoy it, and, the joy of mathematics could remain with them throughout the rest of their lives.

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IT Enabled Teaching

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DISCLAIMER

*The opinions presented on these slides
are those of the slides and not
necessarily of the speaker.
No animals were harmed in the
preparation of this lecture; however,
a few WWW sites were hit.*

Preamble

- Education is one of the keys to social development and virtually every aspect of quality of life.
- Unfortunately, education in general is at difficult crossroads. The educational institutions are facing acute problems — severe budgetary constraints, rapidly increasing enrollment demands, spiraling educational costs etc.
- In spite of the best intentions of the planners, the education has not penetrated to the remote villages.
- The need of the hour is to evolve a suitable methodology to enhance educational-net and to improve the quality of education considering the ground reality.

Evolution of Education System

- Ancient Guru-centric system
- Collegiate system
- Distance Education, Open Schools, Open Universities

Profile of the Modern Student

- Many students hold a part-time or even a full-time job while attending Educational Institution.
- Some students are trying to support families.
- Students come from diverse backgrounds and have different learning styles and needs.
- These and other pressures detract student from the time that s/he can devote to learning.
- Students tend to utilise poorly resources such as class time, professor office hours, study guides, textbooks and library.
- Textbooks are often difficult for the average student to comprehend. Examples are frequently too simple to be useful on more complex problems.

Course Delivery Objectives

- Enhancement of Knowledge
- Enhancement of Skill
- Education

Role of Technology in Education

- The real value of any good technology is not that it will do things for us faster, better and cheaper but that it makes us better what we do.
- Digital tools will provide new levels of access, analysis, simulation and synthesis that generate increased participation in intellectual work.
- Supplement conventional teaching
- Aid in transformation from teacher-centric to learner centric.
- Role of teacher will be as facilitator and help learner to develop their learning skills, character and vision of the future.

Roles of Teacher

- Shifts to the facilitation of increasing autonomous student practices.
- Curriculum design becomes the art of posing problems, introducing large questions and then facilitating work on them.
- The shifts from lecturing to fomenting questions, doubts, uncertainties, suggesting strategies of inquiry and questioning the quality of reports and conclusions.

Roles of Teacher

- Mentoring:
 - challenging students progress & providing support
- Design Learning experiences & products
- Facilitating Learning experiences
- Collaborating with groups of learners
- Testing, Measuring, Certifying
- Learning-to-Work Counselor
- Cognitive Counselor

Enabling Technology

- Computer Aided Instruction (CAI)
- Multimedia
- IT Enabled Education
 - Web Based Education
 - Multi-modal Distance Education

Form of Communication

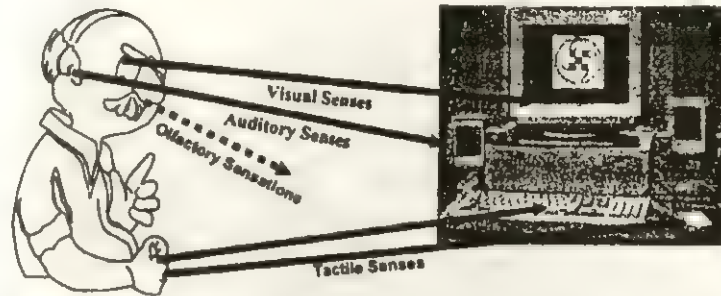
Human beings are inherently **multi-media** communicators

- **Written form of communications**
 - Matured, refined and well adapted for formal communication
 - Lacks warmth, authentication and spontaneity of oral communication
- **Oral Communications**
 - Supplements written communications
 - Can instantly reach a person across the globe – Phone
 - Can reach millions at the same time – Radio
- **Visual Communication**
 - Colourful, spontaneous, and transcends language barrier, even cultural barrier – Theatre, Cinema, Television
- **Interactive form of Communication**
 - In-built in Human – Changing favourite programme on the cable channel

Contribution of Digital Computer

- The most important contribution of digital computer is the multimedia phenomenon
 - permits written, oral visual communication to be presented from a single device
 - different media like text, graphics, audio and video are stored as a single medium - bits and bytes.
- Digital computer permitted a very powerful medium of communication in the form of interactive communication.
 - Matured into a friendly and powerful form of Graphical User Interface (GUI)

Background



Sight	_____	Multimedia
Sound	_____	
Touch	_____	
Taste	_____	
Smell	_____	
Mind, the prime cognitive sense	_____	

- As integrator.
- Active participation as Explorer through interaction.

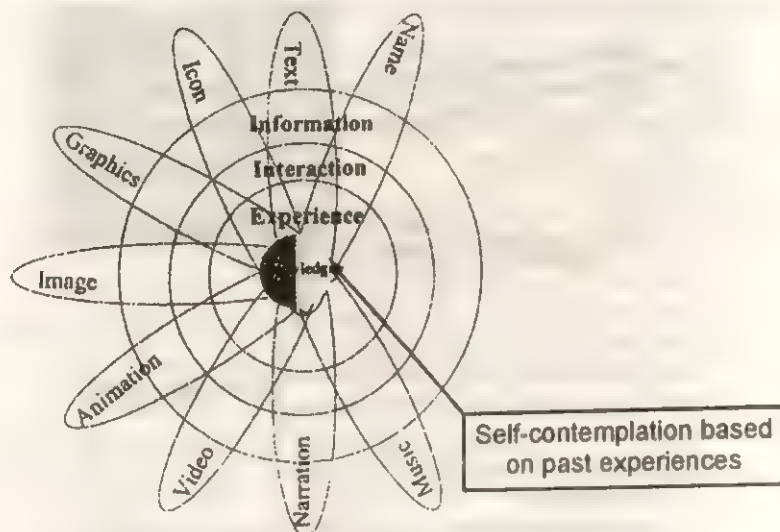
Is it Multi-media?



He is really brilliant.
He is listening to music
on a walkman,
talking in the cell-phone,
and
also watching the TV

Perhaps not! Because the messages arriving from
different sensory organs are independent

Communication using Multimedia

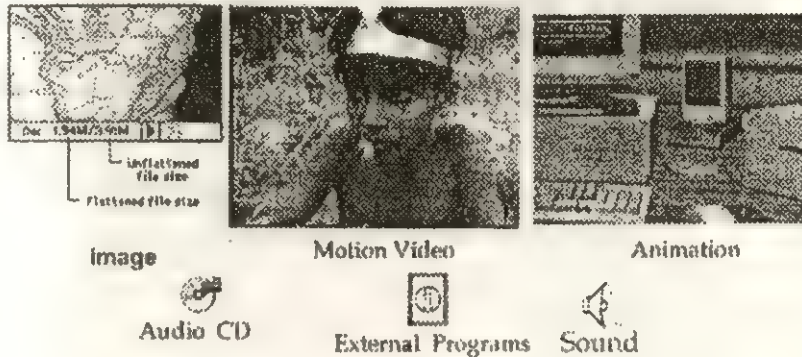


Multimedia Objects

- Text
 - Printed Text ➤ Scanned Text ➤ Electronic Text ➤ Hypertext
- Graphics & Images
 - Bitmaps
 - Clip Art
 - Digitised picture
 - Hyperpicture
- Animation
 - Frame Animation
 - Vector Animation
 - Computational Animation
 - Morphing
- Sound
 - Waveform Audio
 - CD Audio
 - CD +, CD Extra, Enhanced CD
 - MIDI
 - Hyperaudio
- Motion Video
 - Live video feeds
 - Videotape
 - Videodisc
 - Digital Video
 - Hypervideo

Multimedia Objects

This is the text page where Page can be thought of as a two dimensional representation of Information



Structure and Tools

- Multimedia titles have structure or architecture
 - Navigational structure determines how user can go through the overall content
 - Activity structure determines what learner do interact within a local activity
- Different models of structure lend themselves to different multimedia development tools

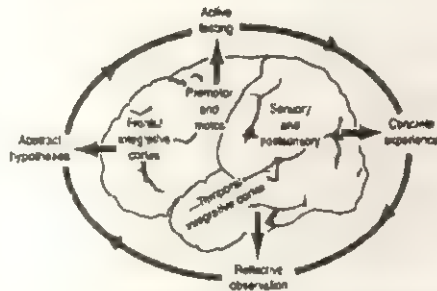
Media + instructional methods

- Media elements present and illustrate content
 - Text, audio narration, music, graphics, animation and video
- Instructional techniques support learning
 - Examples, practice exercises, feedback
 - Simulation of an actual work environment

When to use e-Learning

- Cognitive skills: solving problems, applying rules, distinguishing items
- Psycho-motor skills: coordination physical movement and thought
- Attitudinal skills: opinions and behaviours
- Which is hardest to teach with multimedia?

The Art of Changing the Brain



- The Learning Cycle:
Sense → Integrate → Act
 - Learning originates with concrete sensory experience
 - Reflective observation integrates inputs in patterns and develops generalizations or abstract hypotheses
 - Active learning tests the results of motor output

Three theories of Learning

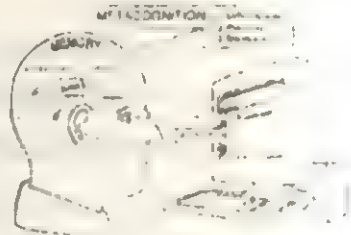
- Receptive: information acquisition
 - Learning adds information to memory
 - Instruction delivers information efficiently
- Directive: response strengthening
 - Strengthen stimulus-response associations
 - Drill-and-practice with reinforcing feedback
- Guided discovery: knowledge construction
 - Learner builds a mental representation
 - Guide learner in the context of solving problems
- Is one theory right? Or a combination?

Types of e-Learning goals

- Inform: build awareness, e.g., about a company's organization
- Perform: build skills, e.g., how to use software or how to evaluate bank loans
 - Procedural: step-by step tasks
 - ✓ Near transfer from training to application
 - Principle-based: guidelines and problem-solving skills
 - ✓ Far transfer from training to application

How do people learn?

- Two information processing channels:
 - visual and auditory, each with limited capacity (attention)
- Working memory has limited capacity:
 - 7 chunks plus or minus 2
- Learning occurs by active processing
 - From working to long-term memory
 - Rehearsal encodes knowledge
- Knowledge must be retrieved from memory
 - Retrieval brings knowledge back into working memory



More practice aids learning

- Well designed practice exercises provide opportunities for encoding knowledge or skills
 - The more encoding opportunities, the more integration
 - Logarithmic relationship between amount of practice and time to complete tasks
 - Improvement occurs regardless of initial ability
- Tradeoff of time in development and lesson
 - Interactive practice can be harder to design
 - Practice also adds to training time: eventually there are diminishing returns on learning
- Spacing practice is superior to massed practice e.g., at end of lesson
 - Spacing effect is not immediate but after a period of time

Apply media principles to practice

- Contiguity: keep text close to graphics
- Modality: use audio to explain graphics
 - But audio is transient, so redundant text and graphics is OK for practice questions
 - Feedback should also be presented in text
- Redundancy: use text alone
 - Don't narrate text directions or practice questions
- Personalization: use conversational language
 - Provide hints and feedback in first & second person

Train learners to self-question

- Learners can ask and answer their own questions during lessons: "How can I apply the program features to my job?"
- Agent could suggest such questions
- Why encourage self-questioning?
 - Active engagement improves learning
 - Developing meta-cognitive skills improves learning

How will you add practice?

- What kinds of practice questions are more effective?
- Why is it better to think of them as practice than quiz questions?
- What kind of interactive exercises are you planning?
 - Discuss constructive exercise.
 - Discuss Touring of machine simulation.
- How many practice exercises will you have?
- Where will your exercises appear?

Content Creation

- Requires content structuring suitable to particular modes and dissemination mechanism
- Teaching pedagogy, Cognitive aspects, Visual Design and interaction Design should be given due weightage
- Requires productivity tools to develop content with ease and within short time span

Content Creation

- It is the backbone of the Teaching-in Absentia mode.
- Complex task.
- Requires Knowledge in
 - Subject domain
 - Instruction Design Methodology
 - Media technology
 - Presentation and Implementation Methodology & Techniques.
 - ✓ *Courseware Engineering*

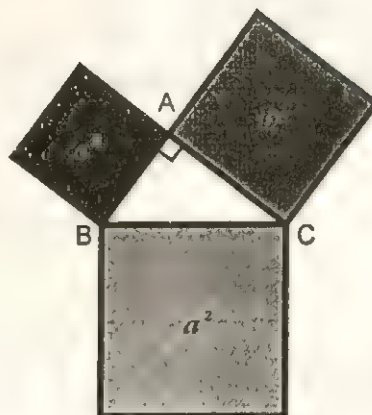
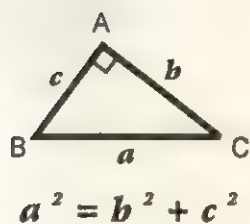
Finally

Some Examples

Thank You

Pythagoras Theorem (2)

Pythagoras Theorem



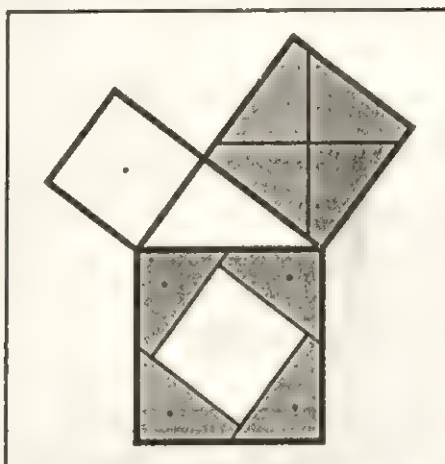
Applet

How to use this applet

- drag the red point.
- Press "Define" button.
- drag five pieces of quadrilaterals to fit in the square below.

Init

(C)1997-2000 **TES**

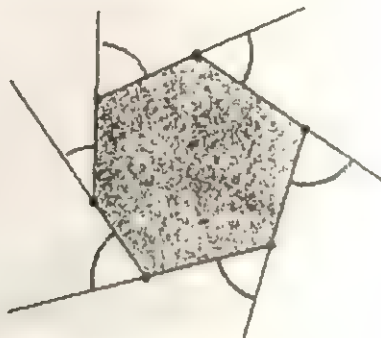


Reference "Pythagoras Theorem" OYA, Shinichi, 1975, Tokai University Press

The Sum of Outer Angles of a Polygon

About the applet

What is the sum of the angles?



Applet

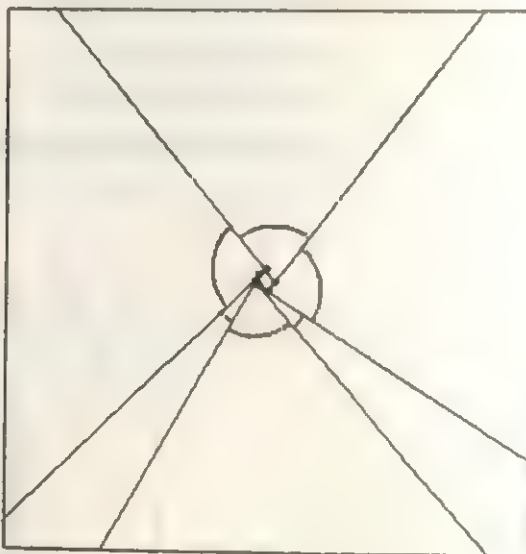
1. Click some points to make a polygon.
2. Press "OK" button to close the polygon.
3. Press "Scale down" button.
4. What do you find?

Scale down

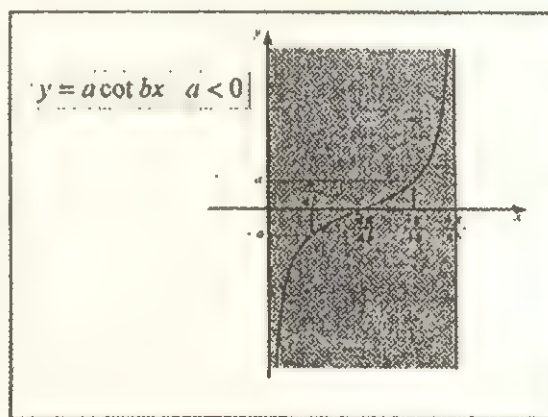
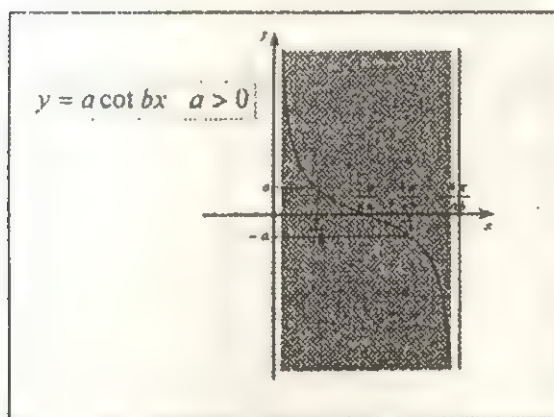
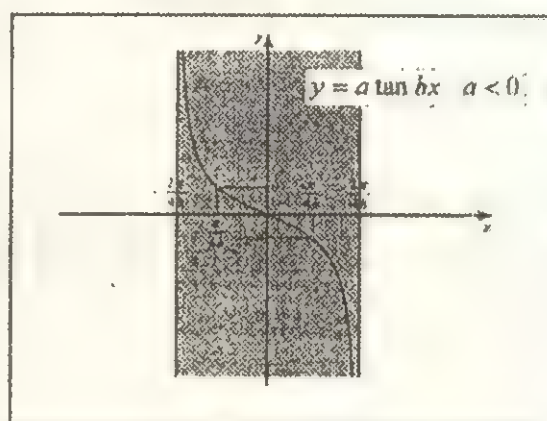
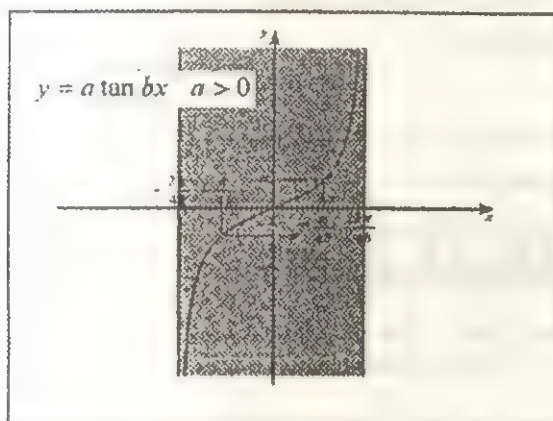
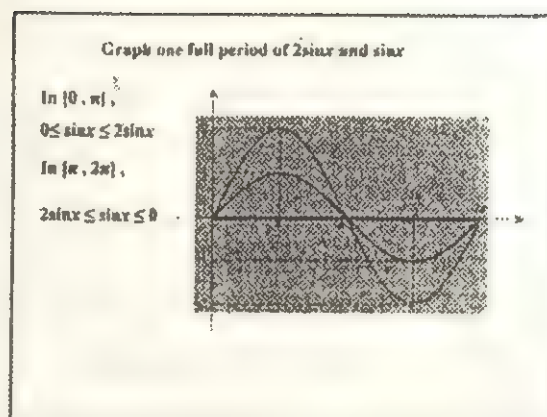
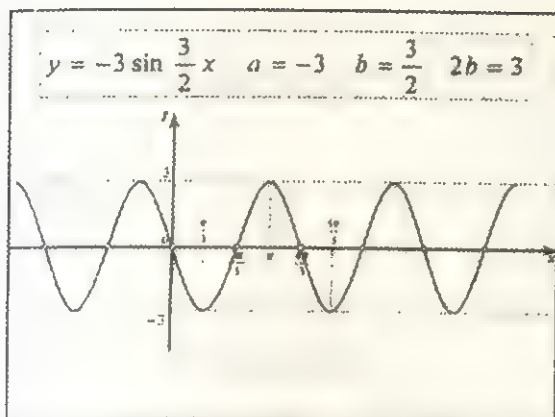
Scale up

Init

(C)1997-2000 **TES**



The idea was presented by a participant
at theme group T2 (Computer and teaching of math) on July 29, 1988
in ICME6 (Sixth International Congress on Mathematical Education)
Budapest, Hungary



CTE ORIENTATION PROGRAMME

Subject : mathematics

Dated : 22nd & 23rd May '06

Sl. No.	Name of Participants	Name of School
1.	Smt. Kuhu Bhattacharya	Beltala Girls' High School.
2.	Smt. Rupasree Bhaumik	Jadavpur Adarsha Balika Sikshayatan, Jheel Road.
3.	Smt. Papiya Pal	Jadavpur Adarsha Balika Sikshayatan, Jheel Road.
4.	Smt. Krishna Sarkar	Sakhawat Memorial Govt. Girls' H. School.
5.	Smt. Subhra Guha (Roy)	Sakhawat Memorial Govt. Girls' H. School.
6.	Smt. Minara Yeasmin	Kamala Girls' School.
7.	Smt. Lata Pal	Kamala Girls' School.
8.	Dr. Ruby Das	Alipore Multipurpose Govt. Girls' School.
9.	Shayeka Khatun	Lake School for Girls'.

SANSKRIT

PROGRAMME 24-05-2006

(C.T.E.), Hastings House

- 1) Atithi Baranam
- 2) Welcome Address – by Prof. Nina Nandy, Officer-in-Charge
- 3) Inauguration – by Prof. Naba Narayan Bandyopadhyay
- 4) Address of Chief Guest – by Prof. Naba Narayan Bandyopadhyay
- 5) Key-note – by Sm. Geeta Mukherjee, Programme Co-ordinator

Orientation Programme for ten Sanskrit Teachers' of Secondary Schools, organised by Institute of Education for Women, CTE, Hastings House.

Topic : New Techniques of Teaching Sanskrit Language

Venue : Institute of Education for Women, Hastings House, 20-B, Judges Court Road, Alipore, Kolkata-700 027

Dated : 24th and 25th May, 2006

PROGRAMME : 24-05-2006

- 10-30 – 11.00 a.m. : Registration
- 11-00 – 11-05 a.m. : Inauguration Song.
- 11-05 – 11-10 a.m. : Welcome Address by Prof. Nina Nandy
- 11-15 – 11-20 a.m. : Inauguration by Chief Guest
Prof. Naba Narayan Bandyopadhyay, Director, School of Vedic Studies, Rabindra Bharati University.
- 11-20 – 11-30 a.m. : Objective of the Programme by Prof. Geeta Mukherjee
- 11-30 – 11-40 a.m. : Address by Chief Guest
- 12-00 – 12-10 Noon : T E A B R E A K
- 12-10 – 12-40 p.m. : Lecture and Demonstration by Prof. Tanmoy Bhattacharya, Ramakrishna Mission Institute of Culture, Golpark, Kolkata.
- 12-40 – 01-20 p.m. : Lecture and Demonstration by Prof. Dr. Ruma Bandyopadhyay, Basanti Devi College, Kolkata.
- 01-20 – 02-00 p.m. : Lecture on Micro teaching Skills by Prof. Manjulika Roy, A.B.T.T. Colleges, Kolkata
- 02-00 – 02-10 p.m. : Interaction with speakers.
- 02-10 – 02-30 p.m. : LUNCH BREAK
- 02-30 – 04-00 p.m. : Group Activity
- a) Each group will select a topic and prepare teaching aid for teaching the topic in Class-room situation.
- b) The topic will be chosen for Secondary Syllabus of W.B.B.S. Edn.
- 04-15 – 04-30 p.m. : TEA BREAK
- 04-30 – 05-00 p.m. : Brief discussion on teaching aids.

PROGRAMME ON 25-05-2006

- 11-00 – 12-00 Noon : Group Activity Continued :
- a) Each group will prepare a write-up on their own topic, mentioning the steps of using the teaching aids.
- 12-00 – 12-15 Noon : TEA BREAK
- 12-15 – 02-00 p.m. : a) Presentation by each group on their activities.
- b) Experts' Comment.
- 02.00 – 02-45 p.m. : LUNCH BREAK
- 02-45 – 05-00 p.m. : Valedictory Session
- a) Co-ordinator's Address
 - b) Distribution of Certificate
 - c) Vote of Thanks.

প্রধান অতিথির প্রতিবেদন : সঞ্চালিকার কলমে

গীতা মুখোপাধ্যায়

২০০৬ সালের মে মাসের ২৪-২৫ তারিখে দু’দিনব্যাপী ইন্সটিটিউট অব এডুকেশন ফর উইমেন, হেস্টিংস হাউসে সি.টি.ই. ইন্-সার্ভিস টিচার্সদের জন্য সংস্কৃতবিষয়ক এক প্রশিক্ষণ ব্যবস্থার আয়োজন করে। বিষয়টি ছিল “সংস্কৃত ভাষা শিক্ষণের নতুন পদ্ধতি”।

বাসন্তী দেবী কলেজের সংস্কৃত বিভাগের অধ্যাপিকা ডঃ শ্রীমতী রুমা বন্দ্যোপাধ্যায় তাঁর সুমধুর সুরশৈলীর মাধ্যমে সঙ্গীতমূর্ছনায় সংস্কৃতে উদ্বোধনী সঙ্গীত পরিবেশন করে সমাগত সুধীবৃন্দের শ্রোত্রবৃত্তিকে তৃপ্ত করে। মঙ্গলময় প্রদীপ প্রজ্জ্বলন করেন স্কুল অব বেদিক স্টাডিস্, রবীন্দ্রভারতী বিশ্ববিদ্যালয়ের অধিকর্তা, বিশিষ্ট অধ্যাপক, শ্রীযুক্ত নরনারায়ণ বন্দ্যোপাধ্যায় মহাশয়।

সুযোগ্য বক্তা অধ্যাপকপ্রবর তাঁর সংস্কৃতবিষয়ক নবপদ্ধতিশিক্ষণ বিষয়ের উপর আলোকপাত করতে গিয়ে প্রশিক্ষণার্থী সংস্কৃত শিক্ষকদের প্রতি তাঁর যুক্তিনিষ্ঠ সারগর্ভ ও মনোজ্ঞ বক্তব্য সুশৃঙ্খলভাবে উপস্থাপিত করেন।

সংস্কৃত ভাষা ও সাহিত্যের ভিত্তিভূমি থেকে শুরু করে ধারাবাহিকভাবে পরম্পরা রক্ষা করে সংস্কৃত ভাষা-সাহিত্য ও ব্যাকরণের স্থান, মাহাত্ম্য, গুরুত্ব ও তাৎপর্য ব্যাখ্যা করেন স্বল্প ভাষণের মধ্য দিয়ে।

প্রথমে প্রশিক্ষণার্থীদের উদ্দেশ্যে তিনি বলেন যে, শুধু জানলেই চলবে না, ভালভাবে তা যাতে ছাত্রছাত্রীদের কাছে প্রকাশ করা যায়, সেই শৈলীটাও শিক্ষকশিক্ষার্থীদের আয়ত্ত করতে শিখতে হবে। আমরা সাধারণতঃ দু’ধরনের শিক্ষককে দেখি। একদল, নিজেরা খুব ভাল বিদ্যাচর্চা করেছেন কিন্তু প্রকাশ করতে পারেন না; ‘কস্যাচিৎ আত্মসংস্থিতা’। আবার একদল আছেন যাঁরা ভালভাবে বিষয়টি শেখেন নি, ভেতরে ভেতরে অত বোঝেন না কিন্তু অজ্ঞতাকে ঢাকার জন্য প্রকাশ করেন খুব ভালভাবে— ফ্লাওয়ারিং করে— দারুণভাবে বলে যান; ‘সংক্রান্তিঃ কেষাঞ্চিৎ বিশেষযুক্তা’। বাস্তবে আমরা তাঁকেই উপযুক্ত শিক্ষক বলব যে ভাল উভয়তঃ, অর্থাৎ তাঁর বিদ্যাচর্চাও উন্নতমানের এবং প্রকাশভঙ্গিমাও অনবদ্য। “সঃ শিক্ষকানাং ধূরিমন্তকা যস্য দ্বয়ম্”— অর্থাৎ তাঁকেই সর্বাগ্রে স্থান দেওয়া হয় যাঁর মধ্যে দুটি গুণই থাকে।

এবার আসি তিনি সংস্কৃত শিক্ষকশিক্ষিকাকে কিভাবে শিক্ষাদান কার্যকে কি মানসিকতার পটভূমিতে গ্রহণ করতে বলেছেন— তিনি বারংবার সাবধানবাণী উচ্চারণ করেছেন এই বলে, শিক্ষকরা যেন সংস্কৃতের বিশাল ভাণ্ডারের কথা বা ব্যাকরণের জটিলতা বা শাস্ত্রের গভীরতা নিয়ে ছাত্রছাত্রীদের ভয় দেখান না।

তবে একথাও মনে রাখতে হবে যে শুধু ভাষা শেখাই উদ্দেশ্য নয়, ভাষা শিক্ষার মাধ্যমে সাহিত্য ও ব্যাকরণের দিকটাও শিখতে হবে। পুরাণ, ন্যায়, বেদ, বেদান্ত, কাব্য, দর্শন, কামশাস্ত্র, স্মৃতিশাস্ত্র, চৌর্যশাস্ত্র, রত্নবিদ্যা, সংগীতবিদ্যা, চতুর্বেদ প্রভৃতি বিষয়েও অল্পস্বল্প জ্ঞান দিতে হবে।

উদাহরণস্বরূপ তিনি বলেন যে, তিপ্/তু/তাম্/অস্/সু ইত্যাদি রূপ যোগ করলে কি রকম হবে আগে নিজে দেখিয়ে পরে ২-৩টি করে বানাতে বলতে হবে। তারপর ‘সু’ যোগ করলে কি হবে? ছাত্রছাত্রীরা নিজেই ক্ষমতা অর্জন করবে। তোতা পাখির মত শেখানোর প্রয়োজন নেই সব রূপের। পাণিনি তো ১৮টি রূপের মাধ্যমে সব শিখিয়েছেন। বিদ্যাসাগর মহাশয় শেষদিকে কি থাকবে কি থাকবে না তা ঠিক করে সরল করে দিয়েছেন। এরকম নিয়ম নিজেও আবিষ্কার করা যায়।

প্রথমে ‘কৃদন্ত পদ’ শেখালেই চলবে। ভাবনা-চিন্তাকে সরলভাবে শেখাতে হবে। একটি-দুটি শেখ বলে অল্প শেখাবেন— তারপর ব্যবহার করতে হবে। সরলভাবে শেখাতে হবে। যেমন ‘পিবতি’ না জানলেও চলবে। ‘কৃ’ ধাতুটা শুধু শিখিয়ে দিতে হবে। ‘দানং’, ‘ভোজনং’, ‘পানং’ শিখিয়ে দেবেন। ‘দদাতি-দন্তঃ-দদতি’ শেখানোর দরকার নেই। কৃদন্ত পদ শেখালেই চলবে। ‘এন্তো শব্দরূপ’ ‘এন্তো ধাতুরূপ’ বলে গোড়া থেকে ভয় দেখানোর দরকার নেই। অল্প বাছাই করে শিখিয়ে দিতে হবে— বেশি করে মুখস্থ করানোর দরকার নেই। Translation/precis/summary— যাই হোক না কেন দুকলম নিজের ভাব সংস্কৃতে লিখতে পারবে। ছোট ছোট সরল বাক্যে পরিবারের কথা, প্রতিবেশির কথা, বাগানের কথা, রাজনীতি, ক্রীড়া, চলচ্চিত্র, সংগীত— যা ভাল লাগে সেই বিষয়ে দু-তিনটি বাক্য লিখতে দিতে হবে। না হলে ভাষা শিক্ষা ব্যর্থ হবে। রোজই স্কুল টেস্টের বাইরে পাঁচ-দশ মিনিট আলাদা করে রেখে দিতে হবে, সংস্কৃতভাষায় কথা বলার জন্য; যেমন— ‘কিং তে নাম’, ‘বদ তব পিতুঃ নাম’ ইত্যাদি বাদালোচনার মাধ্যমে ক্রমশঃ এগোতে হবে। ছাত্রছাত্রীদের সঙ্গে কথা বললে শিক্ষকশিক্ষিকার নিজেরও সুবিধা হবে— চর্চা বা অভ্যাস থাকবে। ‘যাবৎ না ভাষ্যতে’ ততক্ষণ ভাষা শেখা যায় না— ইংরাজী বা বাংলার ক্ষেত্রেও যেমন সংস্কৃতের ক্ষেত্রেও তা সমভাবে প্রযোজ্য। সপ্তাহে একদিন এটা করলেও উন্নতি লক্ষ্য করা যায়।

বিদ্যালয় স্তর থেকেই ছোট ছোট সংস্কৃত বাক্য ব্যবহারের মাধ্যমে আগ্রহ চেতনা ও আকর্ষণ সংস্কৃতির প্রতি বাড়ানো যায়। নিজের শিক্ষাকে ব্যবহার করে সংস্কৃতির মাধ্যমে আচার-আচরণ করার মানসিকতা থাকতে হবে। ছাত্রছাত্রীদের মধ্যে সচেতনতা বাড়াতে হবে। উপলব্ধি করতে হবে যে, সংস্কৃত শুধু ভাষা নয়, শাস্ত্র-ও বটে। ভাষাশিক্ষার মাধ্যমে বিদ্যাচর্চা করবে। সংস্কৃতভাষার মাধ্যমে সেই বিদ্যাটা আয়ত্ত করবে। চর্চার গুরুত্ব মহিমান্বিত ও তাৎপর্যবহু করতে হবে। জনশিক্ষার উপযোগী করে তুলতে হবে শিক্ষককে নিজেকে। প্রাচীন জ্ঞানকে সংস্কার করে আধুনিকজ্ঞানের সঙ্গে সমন্বিত করতে হবে। দু-চারজন আচার্য্য সংস্কৃতির দুর্ভাগ্যকে ব্যাখ্যা করেছেন— আমাদের শিক্ষকদের ও পথ থেকে সরে এসে সমাজজীবনের উপযোগিতা ও মহিমাকে গোড়া থেকে উপলব্ধি করতে হবে।

অনেক পণ্ডিত হতাশা প্রকাশ করেছেন— সেই হতাশাকে প্রশয় দেওয়ার দরকার নেই কারণ আমরা জানি যে, “অমৃতং মধুরং সম্যক্, সংস্কৃতং হি ততোহধিকম্”। শিক্ষিকাদের তিনি বলেন যে, সংস্কৃতশিক্ষার ক্ষেত্রে গান ইত্যাদির মাধ্যমে মধুরতা আনা যায়। এ ক্ষেত্রে শিক্ষকদের উচ্চারণ ভাল হতে হবে— যথার্থ শিক্ষার মাধ্যমে মাধুর্য্য আনতে হবে।

সর্বশেষে তিনি বিশেষভাবে জোর দেন যে পুঁথিতে, আচার্য্যের মাধ্যমে সংস্কৃতির অনেক কিছু ছড়িয়ে আছে। এরই থেকে সাংস্কৃতিক উত্তরাধিকার অনুসরণ করে খারাপটা বর্জন করে ভালটা নিতে হবে।

সংস্কৃত শিক্ষণপদ্ধতিতে মধুরতা এনে দিতে হবে। সুর বা গল্প প্রয়োগ করে মাধুর্য্যকে ছড়িয়ে দিতে হবে। তাহলেই সংস্কৃত ভাষা, সাহিত্য ও ব্যাকরণ জনজীবনকে প্রভাবান্বিত করতে পারবে। তাহলেই সংস্কৃত ভাষা, সাহিত্য ও ব্যাকরণের মাহাত্ম্য ও গৌরব বর্ধিত হবে। সবশেষে উপস্থিত সকলকে তিনি কৃতজ্ঞতা, ধন্যবাদ ও নমস্কার জানান।

Co-ordinator's Report

“शिवास्ते सन्तु पन्थानः”

It is a great matter of rejoice that C.T.E. Hastings House organised an orientation programme (two day long respectively on 24.05.05 and 25.05.06) for Ten in service teachers of secondary schools.

Six months before a total proposal was taken in the meeting of Teaching Faculty of Institute of Edn. for Women, Hastings House, Kolkata, 2005.

Then gradually the programme was designed and formulated in collaboration with Dept. of Higher Education and S.C.E.R.T. etc.

The programme co-ordinator was Sm. Geeta Mukherjee and Ten participants engaged in school service teaching were invited to participate in the programme.

The topic was "The new techniques of teaching Sanskrit Language".

The resource persons were Prof. S.J. Tanmay Bhattacharya of Ramkrishna Mission Institute of Culture. He specially insisted on functional Sanskrit. The Participants were charmed and became enchanted with his new attractive method.

Another Resource person was Prof. Manjulika Roy of A.B.T.T. College. She specially interpreted the main essence of Micro Teaching lessons. Using new methods she explained how to teach Sanskrit Language everywhere in phase of Text-Book teaching and grammatical Sutras specifically. Her method was followed by each & every participant individually. And each lesson was evaluated by resource persons and co-ordinators.

Another resource person was Dr. Ruma Bandyopadhyay of Basanti Devi College, Deptt. of Sanskrit. How, with songs and Sanskrit Moral values can be planted amongst the students successfully – this new method was so effective that participants realised it's enchanting power. With help of songs she wanted to reap the sweetness of teaching Sanskrit language.

At last the participants expressed their gratitude and the officer-in-charge awarded them with certificates.

Objectives :

Innovative learning materials

Training in Micro-Teaching

Development of communication Skills through communication games

Classroom organization and activities in Skt language learning

To diagnose what children already know about the language. Use of modern teaching aids OHP, Tape Recorder, Magazine Pictures.

The workshop was continued under three heads

- a) Innovative Teaching
- b) Communication Skills, and
- c) Micro Teaching Skills

Group Activities

- a) Aural & Written Skills
- b) Use of modern techniques
- c) Preparation of draft lesson plan – use of modern techniques.

सर्वे सुखिनः सन्तु सर्वे सन्तु निरामयाः ।
सर्वे पश्यन्तु भद्राणि मा कश्चित् दुःखभाक् भवेत् ॥

সংস্কৃত পাঠ্যক্রম এবং পাঠ্যপুস্তক

অধ্যাপিকা গীতা মুখোপাধ্যায়

সঞ্চালিকা ওরিয়েন্টেশন প্রোগ্রাম ফর ইনসারভিস্ টেন স্কুল টিচার্স, সি.টি.ই.

ইনস্টিটিউট অব এডুকেশন ফর উইমেন, হেষ্টিংস হাউস

সংস্কৃত ভাষা এবং সাহিত্যের মহত্ত্ব :—

সংস্কৃত বিশ্বের প্রাচীনভাষা এবং ভারতীয় সংস্কৃতির স্রোত। এই ভাষায় উদার সংস্কারমুক্ত গভীর শাস্ত্রজ্ঞান এবং লোকোত্তর চিন্তাধারার উপলব্ধিও এই সংস্কৃত সাহিত্যে হয়। সংস্কৃত সাহিত্য ঋগ্বেদের সময় থেকে আজ পর্যন্ত অবাধ গতিতে প্রবাহিত হচ্ছে। বেদ, শিক্ষা, ব্যাকরণ, জ্যোতিষ ছন্দ, নির্বচনশাস্ত্র, অর্থশাস্ত্র, রাজনীতি, জ্যামিতি, ষড়দর্শন প্রভৃতির সঙ্গে সঙ্গে সংস্কৃত সাহিত্য কোমল কাব্যানুভূতির উর্বর জন্মভূমি অর্থাৎ সংস্কৃত সাহিত্যের সঙ্গে ওতপ্রোতভাবে জড়িয়ে রয়েছে।

সংস্কৃতভাষা ভারতের আধুনিক ভাষাগুলিকে প্রত্যক্ষ অথবা পরোক্ষভাবে প্রভাবিত করেছে। মধ্যযুগে প্রাকৃত ও অপভ্রংশ সাহিত্যের সম্যক জ্ঞান সংস্কৃত ব্যতীত অসম্ভব ছিল। আধুনিক ভারতীয় সাহিত্যের অধিকাংশ ভাগ সংস্কৃত সাহিত্যের কাছে ঋণী। বিদেশেও সংস্কৃতির মহত্ত্ব সমাদৃত ও স্বীকৃত হয়েছে। আজ বিশ্বের অনেক বিশ্ববিদ্যালয়ে সংস্কৃত ভাষার সম্যক অনুশীলন চলছে।

রাষ্ট্রীয় ঐক্যের দৃষ্টিতে সংস্কৃতির অনেক মহত্ত্ব রয়েছে। যদিও ভারতবর্ষে বিভিন্ন ক্ষেত্রে বৈষম্য এবং বৈচিত্র্য রয়েছে তথাপি সংস্কৃতভাষা এবং সংস্কৃতসাহিত্য আমাদের দেশকে একসূত্রে বেঁধে রেখেছে। পুরাণে ভারতের ভূগোলের এমনই রূপ চিত্রিত হয়েছে যা পড়ে প্রত্যেক ভারতীয়ের মনে নিজের দেশের প্রতি অগাধ আস্থা এবং শ্রদ্ধা উৎপন্ন হয়ে থাকে। সংস্কৃত সাহিত্যের মূল চেতনা ভারতবর্ষকে একরাষ্ট্রে পরিণত করে তুলেছে। “বসুধৈব কুটুম্বকম্” এবং শৃঙ্খলো বিশ্বমার্যম্ — এইসব মর্মস্পর্শী সংস্কৃত উক্তি মানবমাত্রের প্রতি আত্মীয়তার অভিব্যক্তি।

২০০৫ সালে রাষ্ট্রীয় শৈক্ষিক অনুসন্ধান এবং প্রশিক্ষণ পর্ষদ সংস্কৃতির ব্যাপক মহত্ত্বের কথা চিন্তা করে বিদ্যালয়স্তরে সংস্কৃতির পঠনপাঠন হেতু রাষ্ট্রীয় পাঠচর্চার রূপরেখা নির্ধারণ করতে গিয়ে সংস্কৃতির নতুন পাঠ্যক্রম বিকাশে ভারমুক্ত শিক্ষা এবং আনন্দপ্রদ অনুভূতির উপর জোর দিয়েছেন এবং সংস্কৃত ভাষা ও সাহিত্যের অধ্যয়নকে প্রাধান্য দিয়েছেন। পরিষদ ভাষাবিভাগ প্রসঙ্গে নিম্নলিখিত নতুন বই প্রকাশ করেছেন।

- ১। রুচিরা প্রথমভাগ — ষষ্ঠ শ্রেণীর জন্য।
- ২। শেমুখী প্রথমভাগ — নবম শ্রেণীর জন্য।
- ৩। শাস্বতী প্রথম ভাগ — একাদশ শ্রেণীর জন্য (বৈকল্পিক)
- ৪। ভাস্বতী প্রথমভাগ — একাদশ শ্রেণীর জন্য (কেন্দ্রিক)

পাঠ্যক্রমের উদ্দেশ্য —

উচ্চপ্রাথমিক, মাধ্যমিক এবং উচ্চতর মাধ্যমিক স্তরের সংস্কৃত পাঠের নিম্নলিখিত উদ্দেশ্য আছে।

ষষ্ঠ, সপ্তম ও অষ্টমস্তরে সংস্কৃত ভাষা অধ্যয়ন ও অধ্যাপনের সামান্য উদ্দেশ্য নিম্নলিখিতরূপ —

- ১। বিদ্যার্থীদের সংস্কৃতভাষা সম্পর্কে প্রাথমিক জ্ঞান করানো।
- ২। বোধপূর্বক সংস্কৃত শোনা, বলা, পড়া এবং লেখার ক্ষমতা প্রদান করানো।
- ৩। সংস্কৃত ভাষা ও সাহিত্যের প্রতি অভিরুচি উৎপন্ন করানো।
- ৪। বিদ্যার্থীদের নৈতিক, সামাজিক এবং রাষ্ট্রীয় মূল্যের ঠিকানা ঘটানোর জন্য অনুপ্রেরণা দান।
- ৫। সংস্কৃত শব্দগুলিকে মাতৃভাষার মাধ্যমে পরিচিতি ঘটানো।

নবম-দশম স্তরে সংস্কৃশিক্ষার উদ্দেশ্য —

- ১। সংস্কৃত ভাষায় সামান্য জ্ঞান করানো যাতে সংস্কৃতির সরলংশ শুনে বিদ্যার্থী বুঝে মৌখিক এবং লিখিত অভিব্যক্তি করতে পারে।
- ২। সংস্কৃত সাহিত্যের প্রতি বিদ্যার্থীদের অভিরুচি উৎপন্ন করানো।
- ৩। বিদ্যার্থীদের মধ্যে রাষ্ট্রীয়, সাংস্কৃতিক, সামাজিক এবং নৈতিক মূল্যের ঠিকানা ঘটানো।

একাদশ-দ্বাদশ স্তরে পঠন-পাঠনের নিম্নলিখিত উদ্দেশ্য আছে —

- ১। বিদ্যার্থীদের মধ্যে সংস্কৃত সাহিত্যের প্রতি অভিরুচি উৎপন্ন করা এবং বিভিন্ন উপায়ের সঙ্গে পরিচিত করানো।
- ২। সংস্কৃতভাষায় সামান্যজ্ঞান সুদৃঢ় করা ও ভাষার স্বাভাবিক বৈশিষ্ট্যের সঙ্গে বিদ্যার্থীদের পরিচিতি করানো।
- ৩। সংস্কৃতভাষা শিক্ষার বিবিধ প্রযুক্তি এবং শৈলীর সঙ্গে বিদ্যার্থীদের অবহিত করা ও অবসর সময়ে এই ভাষার উপযোগিতা অনুধাবন করা।
- ৪। নিজের বিচারে সংস্কৃত ভাষায় অভিব্যক্ত করার ক্ষমতার বিকাশ ঘটানো।
- ৫। বিদ্যার্থীদের মধ্যে রাষ্ট্রীয়, সাংস্কৃতিক এবং সামাজিক চেতনা জাগ্রত করানো।
- ৬। বিদ্যার্থীদের মধ্যে নৈতিক মূল্যের ঠিকানা ঘটানো।
- ৭। ব্যক্তিত্বের সর্বাঙ্গীণ ঠিকানা হেতু বিদ্যার্থীদের প্রেরণা জোগানো।

নতুন সংস্কৃত পাঠ্যপুস্তকের বিশেষত্ব — ভারমুক্ত শিক্ষা, আনন্দপ্রদ অনুভূতি, বিশালসংস্কৃত বাস্তবের প্রতিবিন্দু, বিবাদমুক্ত পাঠ্যসামগ্রী, ছাত্রদের চিন্তার জন্য অনুপ্রেরণা প্রাচীন গ্রন্থাংশের সঙ্গে আধুনিক সংস্কৃত রচনার সমাবেশ ঘটানো এবং শিক্ষণ-সংকেতের নির্দেশ।

ষষ্ঠশ্রেণীর জন্য — রুচিরা প্রথমভাগ

বিশেষ বৈশিষ্ট্য —

- ১। পাঠের সংখ্যা — ১৫
- ২। সংস্কৃত শব্দ ও বাক্যের শুদ্ধ উচ্চারণ
- ৩। প্রশ্নোত্তরের মাধ্যমে প্রশ্ন করনের ও উত্তরদানের কুশলতা
- ৪। সংস্কৃতে কথোপকথনের মাধ্যমে আত্মবিশ্বাস বাড়িয়ে তোলা।
- ৫। ভাষিকতত্ত্ব প্রয়োগ করার ক্ষমতা।
- ৬। অধ্যয়ন ও অধ্যাপনের বিষয়সম্পর্কে জ্ঞানবানোয় অভ্যাস।
- ৭। প্রত্যেকটি পাঠে কঠিন ও নতুন শব্দের শব্দার্থ।
- ৮। সার্থক চিত্র সংযোজন।
- ৯। চিত্রে আরোপিত মনোরঞ্জন অভ্যাস দ্বারা জ্ঞান বাড়ানো।
- ১০। রসবর্দ্ধক কথার সমাবেশ।
- ১১। চিত্রের দ্বারা শব্দপরিচয়।
- ১২। নবীন রচনার সমাবেশ।
- ১৩। মা মা করে যেমন প্রথম ডাকে সেই পদ্ধতিতে উপস্থাপনা।
- ১৪। কারক-বিভক্তির সামান্য পরিচয়।
- ১৫। নৈতিক এবং শিক্ষাপ্রদ মূল্যের সমাবেশ।
- ১৬। বিবিধ শব্দ এবং ধাতুর রূপ পরিচয়।

নবম শ্রেণীতে শেমুখী প্রথমভাগ

মূল বিষয় —

- ১। পাঠের সংখ্যা — ১২
- ২। শিশুকে পাঠের বন্ধু বলে মনে করা হয়।

- ৩। ছাত্র এবং পরিবেশ বহুভাষিকতার পরিবেশ অনুকূল।
- ৪। বিদ্যালয়, গৃহ এবং সমাজের পারস্পরিক ব্যবধান দূর করে পরস্পর সামঞ্জস্য বিধান।
- ৫। ছাত্রকে নিজে শেখার ব্যাপারে অবসরপ্রদান।
- ৬। প্রাচীন পরম্পরাগত এবং নতুন সাহিত্য, ব্যাকরণ এবং পরিবেশ সমন্বয় স্থাপন করে সন্তুষ্টি প্রদান।
- ৭। অন্যবিষয় বা অন্য ভাষা থেকে দূরে থাকা নিষেধ।
- ৮। পাঠোপযোগী চিত্রপ্রদান।
- ৯। পাঠের সঙ্গে সঙ্গে ব্যাকরণ পড়ানোর সময় মনকে জিজ্ঞাসু রাখতে হবে।
- ১০। সংস্কৃত প্রাচীন গ্রন্থকে আধুনিক মৌলিক রচনায় অনূদিত করে আনন্দদায়ক সন্মিশ্রণ ঘটানো।

শাস্ত্রী প্রথম ভাগ (একাদশ শ্রেণীতে ঐচ্ছিক বিষয়রূপে নির্ধারিত)

বিশেষ বিষয় —

পাঠের সংখ্যা — ১২

প্রথম পাঠ — বেদামৃতম্

দ্বিতীয় পাঠ — ঋতুচিত্রণ।

তৃতীয় পাঠ — ‘মানো হি মহতাং ধনম্’ — বাল মহাভারত থেকে সংকলিত।

চতুর্থ পাঠ — ‘পরোপকারায় সতাং বিভূতয়ঃ’ — জাতকমালা থেকে গৃহীত।

পঞ্চম পাঠ — ‘সৌবর্ণশকটিকা’ — মুচ্ছকটিক থেকে সংকলিত।

ষষ্ঠ পাঠ — ‘আহারগুণাঃ’ — চরকসংহিতা থেকে নেওয়া হয়েছে।

সপ্তম পাঠ — ‘সন্ততিপ্রবোধনম্’ — ভবানীভারতী থেকে গৃহীত।

অষ্টম পাঠ — দয়াবীরকথা — ‘পুরুষপরীক্ষা’ থেকে সংকলিত।

নবম পাঠ — বিজ্ঞাননৌকা — ‘শ্রীনিবাসের’ তাদের গগনং সৈবধারা থেকে সংকলিত।

দশম পাঠ — ‘কঙ্খামণিক্যম্’ — ‘রূপরুদ্রীয়’ থেকে সংকলিত।

একাদশ পাঠ — ‘ঈশাঃ কুত্রাহস্তি’ — ‘গীতাঞ্জলি’ থেকে নেওয়া হয়েছে। এবং শেষে

দ্বাদশ পাঠ — ‘গান্ধিনঃ সংস্মরণম্’ — মূল গুজরাতি আত্মকথা থেকে সংগৃহীত।

প্রস্তুত সংকলনের সবচেয়ে বড় বিশেষত্ব এই যে সংস্কৃতভাষার অতিপ্রাচীন মধ্যবর্তী এবং অতিনবীন — এই তিনভাষার রূপ এবং বাস্তব এক সাথে রাখা আছে।

এই সংকলনের সবপাঠে বিভিন্ন মানবীয় ভাবের কুশলতার চিত্রণ আমরা পাই। মানবমূল্যের স্থাপনা, সহজাতান্তরিক আকর্ষণ, পরোপকার, বালমনোবিজ্ঞান, আহারের মহত্ত্ব ও প্রবন্ধদক্ষতার দৃষ্টিতে প্রতিটি পাঠই ছাত্রদের জন্য শিক্ষাপ্রদ এবং উপযোগী। পুস্তকের আরম্ভে প্রদত্ত ভূমিকা দ্বারা ছাত্র সংস্কৃত সাহিত্যের ইতিহাসের সঙ্গে পরিচিত হবে।

ভাস্করী প্রথমভাগ (একাদশ শ্রেণীতে ঐচ্ছিক বিষয়)

মূলবিষয় —

১। পাঠের সংখ্যা — ১০

২। মঙ্গলাচরণের মাধ্যমে সমগ্রসৃষ্টির পশ্চাতে যে ঈশ্বর আছে তা প্রতিপাদন করা, ত্যাগের মাধ্যমে উপভোগ করার উপদেশ দেওয়া হয়েছে। লোকতত্ত্বাত্মক চেতনার মাধ্যমে আমাদের বিচার, সংকল্প এবং নির্ণয় সমান হওয়া প্রয়োজন।

প্রথম পাঠ — রামকৃত কুশলপ্রশ্ন

দ্বিতীয় পাঠ — সৌবর্ণো নকুলঃ

তৃতীয় পাঠ — মুক্তিসুধা

চতুর্থ পাঠ — ঋতুচর্যা

পঞ্চম পাঠ — বীরঃ সর্বদমনঃ

ষষ্ঠ পাঠ — শুকশাবকো দন্তঃ

সপ্তম পাঠ — ভব্যঃ সত্যগ্রহাশ্রমঃ

অষ্টমপাঠ — সঙ্গীতানুরাগী সুবরনঃ

নবম পাঠ — বস্তুবিজ্ঞয়ঃ

দশম পাঠ — যদ্ভূতহিতং ততসত্যম্

রাষ্ট্রীয় শৈক্ষিক অনুসন্ধান এবং প্রশিক্ষণ পরিষদ ২০০৫ সালে সংস্কৃতের পঠন-পাঠন হেতু রাষ্ট্রীয় পাঠ্যচর্চার রূপরেখা নির্ণয় প্রসঙ্গে এটি প্রকাশ করেছিল। মূলভাষা হিন্দীতে লেখা ছিল — বাংলায় অনুলিখিত রূপটি উপরে দেওয়া আছে।

मेमासस्य चतुविंशति - पञ्चविंशति दिवसद्वयं व्याप्य संस्कृत २४/५/०६
भाषाशिक्षणविषये या कर्मशाला आयोजिता, तत्र श्रीरामकृष्ण मिशन इन्स्टिट्यूट अक्
कालचार इति प्रतिष्ठानस्य संस्कृतस्य अध्यापक प्रवरेण तन्मयाचायैण विशेषेण भाषितम्

“भवतः नाम किम्?”

“रामानुजशर्मा।”

“भवदीयं शास्त्रं किम्?”

“साहित्यम्।”

“शोभनम्। कति वर्षाणि यावत् भवता संस्कृतं शिक्षितम्...?”

“श्रीमन्! कृपया क्षमा करें। मैं हिन्दी में उत्तर दूँगा। पिछले बारह साल से माने पाँचवी कक्षा से मैंने संस्कृत का शिक्षण लिया है...।”

“एवम्...?”

कस्मिंश्चित् विद्यालये संस्कृतशिक्षकपदनिमित्तम् अभ्यर्थिनः चयनाय आयोजिते साक्षात्कारे पदेच्छुकस्य साक्षात्कारकर्तृश्च मध्ये प्रवृत्तं सम्भाषणम् एतत्। सत्यमेव यत् माध्यमिकविद्यालयात् आरभ्य द्वित्राणि पञ्चाषाणि वा वर्षाणि अन्यतमभाषारूपेण संस्कृतं यैः गृहीतं भवति तेषां मुखात् ‘मया संस्कृतम् अधीतं, संस्कृतं पठितं, संस्कृतं शिक्षितम्’ इति वा क्रियमाणः एतादृशः वाक्यप्रयोगः अस्माभिः श्रुतपूर्वः एव। परन्तु वस्तुतः चिन्त्यमाने एतादृशवाक्यप्रयोगकर्तृभिः किम् अभिप्रेतम् इति तु विचारणीयं भवति। यतः एतेन प्रकारेण एतावन्मात्रं संस्कृतं ये पठितवन्तः ते, स्युः नाम परीक्षासु अत्यधिकान् एव आइकान् प्राप्तवन्तः, परन्तु किं ते अन्येन जनेन धाराप्रवाहरूपेण क्रियमाणं संस्कृतालापं साकल्येन अवगन्तुं प्रभवन्ति...? किं ते संस्कृतसम्भाषणे भाषणे वा कुशलाः...? किं ते धाराप्रवाहरूपेण संस्कृतं पठितुं, स्वाभिलषितं विचारं संस्कृतेन निर्दुष्टं लेखितुं वा प्रभवन्ति...? यदि न, तर्हि ‘मया संस्कृतं शिक्षितम्’ इत्यास्य कोऽर्थः...?

‘भाषाशिक्षणम्’ इत्यत्र प्रयुज्यमानस्य ‘शिक्षा विद्योपादाने’ इति धातोः भावे ल्युटि निष्पद्यमानस्य ‘शिक्षण’ शब्दस्य यद्यपि विद्याग्रहणम् अर्थः, तथापि कीदृशं विद्याग्रहणं तत्, येन परोक्तं नावागम्यते, स्वेनापि वक्तुं न शक्यते, निर्दुष्टं पठनं लेखनं वापि न साध्यते...!

यद्यपि ‘भाषैकदेशग्रहणं तत्र भवत्येव इति कृत्वा तथाविधः वाक्यप्रयोगः क्रियते’ इति समर्थयितुं शक्यं, तथापि नेदं भाषाशास्त्रविदुषां सम्मतम् उत्तरं भवितुम् अर्हति। यतः भाषायाः शिक्षणं नाम तदद्विभूतस्य व्याकरणस्य अधिगमनमात्रं न, तदन्तर्गतानां सूत्राणां नियमानां वा ज्ञानमात्रमपि न। भाषायाः स्वरूपस्य वैशिष्ट्यस्य माधुर्यस्य वा अवगमनमात्रमपि न! किं तर्हि? ते मन्यन्ते यत् भाषाशिक्षणं नाम श्रवण-भाषण-पठन-लेखनाख्येषु चतुर्षु अपि कौशलेषु दक्षताप्राप्तिः एव इति। एषा दक्षता प्राप्ता चेदेव कश्चन काश्चित् भाषां स्वाधीनीकृतवान् इत्यर्थः। अन्यथा तस्य कथने सत्यान्तः नास्ति इत्येव मन्तव्यम्।

स्वकीये परिवारे जातस्य तत्र प्रवृद्धस्य वर्धमानस्य वा कस्यचित् शिशोः भाषाभ्यासः कथं भवतीति परिशीलयाम। आदौ सः परिवारसदस्यनाम् आत्मानं परितः वर्तमानानाम् अन्येषां च मुखात् विभिन्नेषु

प्रसङ्गेषु स्वच्छन्दतया उपयुज्यमानां भाषां शृणोति। बहुकालपर्यन्तं सः श्रवणमेव करोति, नान्यत्किमपि। तत्पश्चात् एकैकं वर्णं, ततः अन्यैः शिक्ष्यमाणं '...म्ब' इति, 'अम्ब..' इति एकैकं शब्दं वा क्रमशः उच्चारयति।

म्बम्बाम्बेति यथा बालः शिक्ष्यमाणः प्रभाषते। - (वाक्यपदीये)

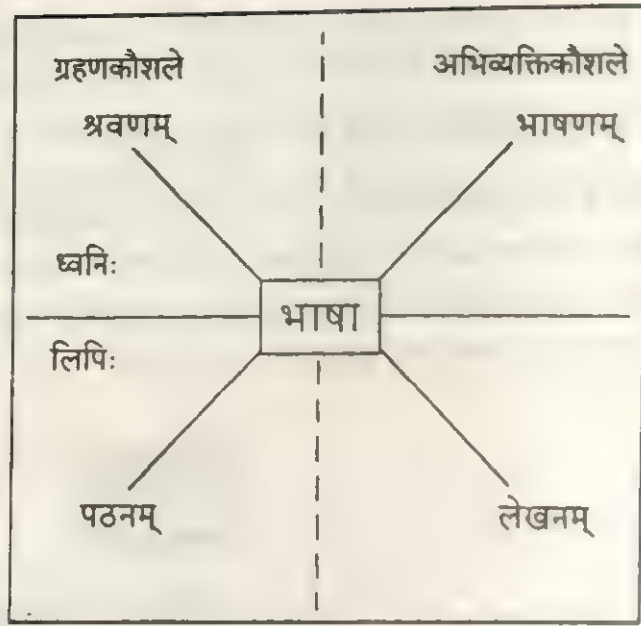
शिशोः मातृभाषाधिगमने शब्दानुकरणमेव प्रथमं सोपानम्। आरम्भे अर्थम् अजानन् अपि सः अन्यैः उक्तं श्रुत्वा तदेव अनुकर्तुं यतते। तत्पश्चात् शब्दानाम् अर्थम् अवगच्छति। लघुभिः वाक्यै क्रमेण सम्भाषणं करोति च। ततः अग्रे सः पठनस्य आरम्भं करोतिः तत्पश्चात् लेखनस्यः तन्नाम श्रवणं भाषणं पठनं लेखनं च इत्येतानि चत्वारि कौशलानि एव भाषाभ्यसास्य क्रमिकाणि सोपानानि।



उपरितने चित्रे यथा दर्शितं तथा भाषाभ्यासं कर्तुम् इच्छुकेन जनेन एतानि सोपानानि क्रमशः आरोढव्यानि। एवम् आरुढं चेदेव कस्याश्चिदपि भाषायाः आत्मसात्करणं सुखेन सिध्यति।

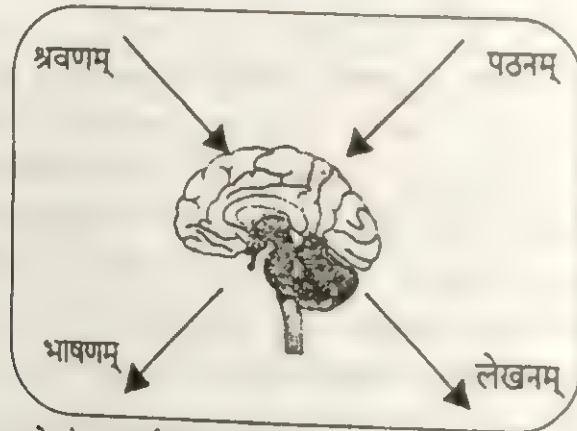
श्रवण-भाषण-पठन-लेखनरूपणि एतानि कौशलानि क्रमेणैव प्राप्तव्यानि इत्युक्तम्। तन्नाम भाषाधिगमने एतेषां पौर्वापर्यमपि एवमेव भवति, नान्यथा।

आदौ श्रवणं, तत्पश्चात् भाषणम् - इत्येतत् सर्वेषामपि अनुभववेद्यम्। अतः अत्र नास्ति कस्यापि विप्रतिपत्तिः। परन्तु 'पठन-लेखनयोर्मध्ये लेखनमेव आदौ भवेत्। तत्पश्चादेव पठनं भवेत्। यतः लेखनाभावे वर्णमालायाः स्वराणां व्यञ्जनानां संयुक्ताक्षराणां वा ज्ञानं न भवति। तादृशज्ञानाभावे पठनं भवितुमेव नार्हति' इति केचन अत्र विप्रतिपत्तिं प्रदर्शयेयुः। परन्तु अत्र 'लेखनम्' इत्यनेन वर्णमालायाः अभ्यासनिमित्तं यत् लेखनं क्रियते तत् नाभिप्रेतम्। पठनलेखनकौशलयोः अभ्यासनिमित्तम् अपेक्षिता प्राथमिकी आवश्यकता भवति वर्णमालायाः अभ्यासः। तदभावे एतन्न सम्भवति। किञ्च वर्णमालायाः अभ्यासः एव लेखनकौशलाभ्यासः नैव। अत्र तु लेखनमित्यनेन स्वाभिलषितस्य अभिप्रायस्य विचारस्य वा प्रकाशनाय यत् लिख्यते वाक्यसमूहरूपं तदेव अभिप्रेतम्। तादृशं लेखनं कर्तुम् इच्छुकः जनः तत्पूर्वं पठनं कुर्यादेव। अतः एतेषां चतुर्णां कौशलानां पौर्वापर्यं नास्ति कापि असङ्गतिः।



भाषाशिक्षणे कौशलानां स्थानस्य स्वरूपस्य च विवरणरूपं चित्रमेतत् अस्माभिः दुष्टपूर्वमेव । चित्रमिदं स्पष्टं दर्शयति यत् भगवतः ब्रह्मणः चत्वारि मुखानि यथा तथा भाषाब्रह्मणः अपि एतानि चत्वारि मुखानि सन्ति इति । चित्रे यथा दर्शितं तथा एतेषु कौशलेषु श्रवणं भाषणं च ध्वनिसम्बद्धे, पठनं लेखनं च लिपिसम्बद्धे । लिपिं विना न भवति पठनं लेखनं वा । अतः कयाचित् भाषया पठनं लेखनं वा कर्तुम् इच्छुकः जनः तदर्थं काञ्चित् लिपिम् आश्रयेत् एव । परन्तु तत्र अमुकभाषायाः शिक्षणे अमुकैव लिपिः इत्यपि नास्ति राजाज्ञा । देवनागरीम् अजानन्तः अपि बहवः अन्यभाषालिपीः आश्रित्य संस्कृतेन पठनं लेखनं वा कुर्वन्तः अद्यापि दृश्यन्ते । लिपिरतु सङ्केतरूपा । अपेक्षानुसारं काले काले तत्र परिवर्तनमपि शक्यते । (देवनागर्यामपि पूर्वं मवंत्रं प्रयुक्तः 'अ' कारः अधुना अतीव विरलतयैव दृश्यते । केषाञ्चित् वर्षाणाम् अनन्तरं सः सर्वथा न दृश्येत अपि ।) तथापि संस्कृतशिक्षणे देवनागरीलिपेः एव प्रयोगः उचितः अपेक्षितश्च । विद्यालयशिक्षणे तु प्रायः देवनागरीलिपिशिक्षणं विना न भवति संस्कृत-शिक्षणस्य आरम्भः ।

पूर्वाक्तेषु चतुर्षु कौशलेषु श्रवणं पठनं च ग्रहणकौशले, भाषणं लेखनं च अभिव्यञ्जनकौशले । तन्नाम आदिमयोः प्रयोगे ज्ञानग्रहणं भवति, अन्ययोः प्रयोगे ज्ञानस्य अभिव्यक्तिः ।



वस्तुतः भाषाशिक्षणे एतेषां चतुर्णामपि समानं महत्त्वम् अस्ति । परन्तु अस्माकं देशे बहोः कालात् संस्कृतशिक्षणे ग्रहणकौशलयोः यावत् प्राधान्यं दत्तं तावत् अभिव्यञ्जनकौशलयोः न दत्तम् । अभिव्यञ्जनकौशले

तु नितराम् उपेक्षिते । सा च उपेक्षा एतावत्पर्यन्तम् अनुवृत्ता यत् विख्याताः संस्कृतशिक्षणविदः अपि संस्कृतशिक्षणस्य उद्देश्येषु अभिव्यक्तेः आवश्यकता नास्ति इति निर्णयं कृतवन्तः । *तत्परिणामतः एषु वर्षेषु ग्रहणकौशलविकासमात्रम् उद्देश्यं कृतम् । अनेन सहजतया ये तावत् तेषां पाठ्यपुस्तकानां साहाय्येन तेन परीक्षक्रमेण च संस्कृतशिक्षणं प्राप्तवन्तः ते ग्रहणकौशलयोरेव कुशलाः जाताः, न तु अभिव्यञ्जनकौशलयोः । अस्य अध्यायस्य आरम्भे पठितं सम्भाषणं यत् प्रवृत्तं तत्र अभ्यर्थिनः संस्कृतसम्भाषणे असामर्थ्यस्य कारणमपि एतदेव ।

अतः इदं तु निर्णेतुं शक्यं यत् चतुर्षु कौशलेषु अन्यतमयोः अन्यतमस्य वा त्यागे कृतेऽपि भाषाशिक्षणं साकल्येन कृतं न भवति । तत्त्यागपूर्वकं संस्कृताभ्यासं कृतवद्भिः क्रियमाणः 'मया संस्कृतं शिक्षितम्' इत्येतादृशः वाक्यप्रयोगः वस्तुगत्या पूर्णसत्योपेतं नैव भवति । एवं सति वास्तविकं संस्कृतभाषाशिक्षणं कामयमानैः अस्माभिः तादृशी काचित् व्यवस्था अनुसरणीया यत्र चतुर्णामपि कौशलानाम् अभ्यासाय विकासाय च समान प्राधान्यं कल्पितं भवेत् । अग्रिमेषु अध्यायेषु तत्सम्बन्धिनः विचाराः प्रस्तुत्यन्ते ।

श्रवणम्



'अस्मदीया परम्परा श्रुतिपरम्परा' इति असकृत् प्रयुज्यमानम् अस्माभिः श्रूयते एव । ब्राह्मणाः देवनागर्याः अन्यस्याः कस्याश्चिदपि वा लिपेः कल्पनापि यदा नासीत् तदा ज्ञानं वंशश्रेणितः वंशश्रेणिं प्रति श्रवणमाध्यमेन एव सङ्क्रान्तं भवति स्म इत्यपि अस्माभिः विदितमेव । श्रवणमात्रेण धारणपटवः 'श्रुतिधराः' बहवः अस्माकं देशे आसन् इति बृहत्कथामञ्जर्यादिषु ग्रन्थेषु श्रूयते एव । सर्वमप्येतत् श्रवणस्य महत्त्वं प्रतिपादयति ।

भाषायाः ग्रहणं प्रायेण श्रवणेन एव भवति । अतः अस्यां प्रक्रियायां श्रवणेन्द्रियस्य अनितरसाधारणं महत्त्वमस्ति । जन्मनः प्रभृति श्रोतुम् अशक्तः बधिरः भाषितुमपि न प्रभवति इत्येषः सर्वेषाम् अनुभवः । शिशोः मातृभाषाधिग्रहणप्रक्रियायां सः शिशुः प्रथमशब्दोच्चारणात्पूर्वं कियत्परिमाणकं वाक्यजातं श्रुतवान् भवति इत्येतत् निश्चयेन विस्मयम् आवहति । सामान्या काचित् गणना एवमस्ति यत् कश्चन शिशुः दिने जाग्रदवस्थायाम् अष्टघण्टाः यावदेव शृणोति चेदपि, सः प्रतिनिमेषम् एकमेव वाक्यं शृणोति चेदपि दशमासान्ते एव सः प्रथमं शब्दम् उच्चारयति चेदपि तत्पूर्वमेव तेन श्रुतानि भवन्ति चतुश्चत्वारिंशत्सहस्राधिकलक्षमितानि वाक्यानि ! (1.44.000) एतावत्परिमाणकस्य वाक्यजातस्य श्रवणं तस्य मस्तिष्के मार्जनायोग्यं कञ्चित् संस्कारं जनयति, यस्य च प्रभावेण सः ततः बहु शीघ्रं तया भाषया भाषितुं प्रभवति । असकृत् श्रुतः शब्दः केवलम् उच्चारयितुं शक्यः, नान्यः - इत्येतत् यदि अवगम्यते तर्हि छात्राणां मुखात् सम्भाषणं कारयितुम् इच्छुकैः शिक्षकैः तत्पूर्वं कियत् श्रावणीयं भवति इत्येतत् स्वयंवेद्यं भवति । अधिकम् अश्रावयित्वा छात्रमुखात् सम्भाषणस्य निरीक्षाकरणं नाम जलसेचनम् अकृत्वैव सस्यं फलतु इति प्रतीक्षणमेव !

दैनन्दिजीवने अस्माभिः बहु श्रूयते। अस्मान् परितः स्थितैः जनैः क्रियमाणः वार्तालापः, वाक्कलहः, स्तोत्रपाठः, गीयमानानि गीतानि, पद्यानि, आकाशवाणी-ध्वनिमुद्रणयन्त्र-दूरदर्शन-सङ्गणकादीनां द्वारा प्रसार्यमाणाः असंख्याः कार्यक्रमाः चेति सर्वमप्येतत् इच्छुकैः अनिच्छुकैः वा अस्माभिः श्रूयते एव। चक्षुरिन्द्रियगतं किञ्चित् सौविध्यं श्रवणेन्द्रियस्य नास्ति यत् नेत्रनिमीलनेन अनपेक्षितस्य दर्शनं वारयितुं तत्र यथा शक्यं तथा अत्र कर्णपिधानेन अनपेक्षितस्य श्रवणं वारयितुं नैव शक्यम्। (यद्यपि अङ्गुलिभ्यां कर्णरन्ध्रपिधानं शक्यं तथापि नेत्रदिमीलनमिव तन्न सुकरम्।) अत एव उक्तम् इच्छायां सत्याम् असत्यां चापि अस्माभिः प्रत्यहं बहु श्रूयते इति। तथापि श्रुतं सर्वमपि अस्माकं मस्तिष्कं गृह्णाति एव इति न नियमः। इच्छापूर्वकम् असकृत् श्रवणं यस्य भवति तम् अंशं तु मस्तिष्कं दियमेन गृह्णाति। इच्छायाम् असत्यामपि असकृत् श्रुतं मस्तिष्केण गृहीतं भवति इत्यपि कादाचित्कतया अस्माभिः अनुभूयते। लोकयाने प्रयाणसमये तत्र पुनः पुनः श्रावितं किमपि गीतम्, आकाशवाण्यां दूरदर्शने वा असकृत् प्रसार्यमाणायाः विज्ञापिकायाः वाक्यानि वा अनिच्छतामपि अस्माकं मस्तिष्के मुद्रितानि भवन्ति एव। एवं सति इच्छापूर्वकम् असकृत् श्रवणं यत्र भवति तत्र विषयग्रहणं नियमेन भवति इति सुस्पष्टमेव।

एतेन इदं स्पष्टं भवति यत् अन्यैः उच्चारितानां ध्वनीनां श्रोत्रेन्द्रियद्वारा ग्रहणमात्रं श्रवणं न इति। तच्च ग्रहणं यदि अवधानपूर्वकं कृतं भवति, येन श्रोता वक्तुः आशयं ग्रहीतुं शक्नोति, तद्विषये प्रतिस्पन्दं प्रकटीकर्तुं स्वयमेव कमपि निर्णयं कर्तुं वा प्रभवति तर्हि एव तत् वास्तविक श्रवणं भवति।

श्रवणे बाधकाः

श्रवणप्रक्रियायां बाधकांशाः केचन भवन्ति। ते च वक्तृगताः, श्रोतृगताः बाह्यश्च इति त्रिधा विभक्तुं शक्याः।

● वक्तृगताः

- वक्ता यदि अत्यन्तं वेगेन वदति तर्हि श्रोता तत् ग्रहीतुं न प्रभवति। संशोधनात् ज्ञायते यत् वक्ता यदि प्रतिनिमेषम् अधिकाधिकं 250-300 शब्दान् उच्चारयति तर्हि एव श्रोता तस्य कथनम् अवगन्तुं प्रभवति। ततोऽधिकाः शब्दाः यदि उच्चार्यन्ते तर्हि सामान्यः श्रोता तत्र सफलः न भवति। अतः वक्ता सावधानेन एव वदेत्।
- वक्ता यदि अस्पष्टतया वदति तर्हि श्रोता तत्र ग्रहीतुं न प्रभवति। अतः वक्ता शब्दानां साधूच्चारणपूर्वकं स्पष्टतया वदेत्।
- वक्ता यदि अत्युच्चैः अत्यन्तं शनैः वा वदति तर्हि अपि श्रोता तस्य कथनस्य श्रवणे बाधाम् अनुभवति। आकाशवाणीकार्यक्रमश्रवणावसरे वयं तत्रत्यं ध्वनिम् अस्मदनुकूपरिमाणकं यथा स्यात् तथा अधिकं न्यूनं वा कुर्मः। अन्यथा श्रवणं क्लेशं जनयति। एवमेव अत्रापि सम्भवति। अतः वक्ता कर्णसुखावहेन ध्वनिना वदेत्।
- वक्तुः उच्चारणक्लेशोत्पादकं स्खलितभाषित्वं (stammering) यदि भवति तर्हि तेन उक्तम् अस्पष्टं भवति।

● श्रोतृगताः

- श्रोता यदि अवहितमनाः न भवति तर्हि श्रुतमपि व्यर्थमेव भवति। अतः सः अवहितमनसा एव शृणुयात्। संस्कृतनाटकेषु तत्र तत्र 'कर्णं दत्त्वा (शृणोति)' इति प्रयोगः श्रूयते। कर्णं

दत्त्वा श्रवणं नाम अवहितमनसा श्रवणमेव । श्रोता कर्णं दत्त्वा यदि शृणोति सहिं सः सुखेन विषयं ग्रहीतुं प्रभवति ।

■ बधिरतारूपः शारीरकदोषः यदि भवति तर्हि श्रवणं बाधितं भवति ।

● बाह्यः

बाह्यः परिसरः यदि शान्तः न भवति, प्रत्युत कोलाहलपूर्णः भवति तर्हि अपि श्रवणं सफलं न भवति । मुख्यमार्गपार्श्वे रेलयानमार्गपार्श्वे वा स्थितासु विद्यालय-कक्ष्यासु पठन्तः छात्राः सर्वदा एतादृशीं बाधाम् अनुभवन्ति । अतः एव प्रायः उत्तमाः विद्यालयाः शान्ते परिसरे एव भवन्ति ।

मातृभाषा इव स्वच्छन्दतया उपयुज्यमानां संस्कृतभाषां श्रोतुम् अद्यतनाः छात्राः प्रायेण अवसरं न प्राप्नुवन्ति । विद्यालये पठतां छात्राणां 'संस्कृतशिक्षकः' इत्येकमेव स्रोतः भवितुमर्हति, यस्मात् ते संस्कृतं श्रोतुं शक्नुवन्ति । परन्तु सः शिक्षकोऽपि यदि संस्कृतेन न भाषते तर्हि तदपि स्रोतः प्रयोगनाय न भवति । अतः संस्कृतशिक्षकस्य प्रथमः गुणः भवेत् यत् सः निरन्तरं छात्रान् उद्दिश्य संस्कृतं श्रावयेत् । तन्नाम सः संस्कृतेन एव वार्तालापं कुर्यात् ।

'कक्ष्यायां संस्कृतपाठं पठता पाठयता च मया संस्कृतस्य श्रावणं तु क्रियते एव । परन्तु छात्राः न शृण्वन्ति । तत्र तेषाम् आसक्तिरेव नास्ति' इति केचन शिक्षकाः आक्षिपन्ति । परन्तु सः आक्षेपः भ्रान्तिमूलः । कक्ष्यायां पाठ्यपुस्तकस्य पठनावसरे क्रियमाणं वाचनाम् आदर्शवाचनम् इत्यादिकमपि यद्यपि श्रावणमेव, तथापि तन्न पर्याप्तम् । (तदपि परिणामकारितया कथं करणीयम् इत्यादयः विषयाः अग्रे पठनकौशलसम्बद्धे अध्याये विस्तरेण वर्णयिष्यते ।) अतः संस्कृतशिक्षकेण तदतिरिक्तमपि किमपि श्रावयितुं प्रयत्नः करणीयः ।

श्रवणकौशलशिक्षणस्य प्रथमं सोपनं भवति श्रोतृषु श्रवणेच्छायाः श्रवणकुतूहलस्य वा जागरणम् । तद् यदि सम्पादितं भवति तर्हि साधनीयस्य अर्धं साधितमिव । किम् अस्माभिः तादृशं चित्रं न दृष्टं यत्र पितामह्याः मातामह्याः वा मुखात् निस्सरन्तीं विद्याधराणां यक्षरक्षसां वा अद्भुतरम्याः कथाः आपिबन्तः इव उपविश्य शृण्वन्तः बालाः दृश्यन्ते...? कथं ते बालाः आहारादिकमपि विस्मृत्य कथाश्रवणे तथा संलग्नाः...? स्पष्टं यत् तेषु कथाश्रवणकुतूहलं जागरितम् अस्ति इति ।

श्रोतृषु श्रवणकुतूहलस्य निर्माणे एते केचन अंशाः प्रमुखकारणत्वं भजन्ते-

● श्रावयितुः विषये श्रद्धा

श्रोतृणां मनसि श्रावयितुः विषये श्रद्धा आवश्यकी । तदभावे तत्पुरतः उपविष्टाः अपि श्रोतारः तेन उक्तं नैव शृण्वन्ति । श्रुतमपि कदाचित् गाम्भीर्येण न गृह्णन्ति । प्रायः बहूनां राजकीयनेतृणां कथनं श्रोतारः तीव्रं न परिगणयन्ति यत् तत्र कारणं तेषां विषये श्रद्धायाः अभावः एव । कथानां कथयित्री पितामही मातामही वा न केवलम् अस्माकं श्रद्धापात्रम्, अपि तु स्नेहपात्रं प्रेमपात्रं चापि । शिक्षकोऽपि यदि तादृशं प्रेमपात्रं भवति तर्हि छात्राः कथं वा तेनोक्तं न शृणुयुः...?

● श्राव्यमाणः विषयः

श्रावयित्रा श्राव्यमाणः विषयः इतिवृत्तम्, उपदेशः, कथा, जीवनचरितं, पाठः, सूचना - चेति यः कोऽपि भवितुमर्हति । परन्तु सः सर्वोऽपि विषयः श्रोतृणां प्रियः भवेदेव इति नास्ति । श्रोतृणां वयः ज्ञानस्तरः इत्यादिकम्

अवलम्ब्य श्रावयित्रा वक्तव्यं भवति। अन्यथा श्रोतारः बहु शीघ्रं जामिताम् अनुभवन्ति। सकृत् जामिता अनुभूता चेत् तत्पश्चात् विषयग्रहणं दुश्शकं भवति। अनेकेषु कार्यक्रमेषु तदा तदा वयं पश्यामः यत् सामान्यानां श्रोतॄणां बालानां पुरतः वापि केचन जटिलं दुरवगाहं च अध्यात्मविषयं सृष्टिप्रक्रियां वा अधिकृत्य भाषमाणाः भवन्ति। श्रोतारः अपि पुनः पुनः हस्तघटीं पश्यन्तः जृम्भमाणाश्च सन्तः क्षणगणनां कुर्वन्तः कथमपि उपविष्टाः भवन्ति। वस्तुतः विद्यालयशिक्षणे अयं क्लेशः नास्ति। यतः तत्र छात्राणां वयोमानं ज्ञानस्तरं च परिगणय्य एव निर्धारितः विषयः शिक्षकेण श्रावणीयः भवति। तथापि शिक्षकेण तदा तदा स्वयम् आत्मा परीक्षणीयः यत् 'किम् अहं छात्रोपयोगिनं विषयमेव श्रावयन् अस्मि, उत मम जिह्वाचापलनिवृत्त्यर्थं किमपि कथयन् अस्मि' इति।

● निरुपणशैली

एतदपि अस्माभिः अनुभूतमेव यत् कदाचित् श्रावयितरि श्रद्धायां सत्यामपि, श्राव्यमाणः विषयः अत्यन्तम् उपयोगी इति ज्ञाते सत्यपि श्रोतारः श्रोतुं नोत्सहन्ते। किं कारणम्? तत्र कारणं तु श्रावयितुः विषयनिरुपणशैली एव। समानः निरुपणक्रमः सर्वत्र सफलः न भवति। श्रोतॄणां वयोमानं ज्ञानस्तरं च अवलम्ब्य वक्त्रा निरुपणक्रमः परिवर्तनीयः भवति। सरलोऽपि सरसोऽपि विषयः श्रावयितुः अनाकर्षकेण निरुपण-क्रमेण श्रोतॄणां शिरोवेदनां जनयति कदाचित्। एतद्वैपरीत्येन व्याकरणं तत्सदृशम् अन्यं कमपि विषयं चापि स्वीयया सरसया शैल्या निरुपयन्तः केचन अध्यापकाः छात्राणां मनः हरन्ति। अतः श्रावयित्रा चित्ताकर्षकः निरुपणक्रमः अनुसरणीयः। विषय-स्पष्टीकरणाय तेन प्रदर्श्यमानानि उदाहरणानि अपि श्रोत्रवगमयोग्यानि तदनुभवविषय-भूतानि च भवेयुः।

परिणामकारकं सार्वजनिकाभाषणम् (Effective Public Speaking) इत्यमं विषयम् अधिकृत्य लिखितानि बहूनि पुस्तकानि अद्य विपण्याम् उपलभ्यन्ते। तत्र एते सर्वेऽपि अंशाः विस्तरेण निरूपिताः भवन्ति। श्रवणकौशलस्यैव प्रकृतविषयत्वात् तत्सम्बद्धाः श्रावणोपयोगिनः केचन एव विचाराः अत्र प्रस्तुताः।

संक्षेपरूपेण एवं वक्तुं शक्यते यत् शिक्षकः छात्रोपयोगिनमेव विषयम् आकर्षक-शैल्या सरलोदाहरणसहितं यदि उपस्थापयति तर्हि छात्राः निश्चयेनापि कुतूहलेन तं शृण्वन्ति।

छात्राणां श्रवणकौशलविकासाय शिक्षकेण अनुसर्तुं योग्याः केचन उपायाः एते भवितुम् अर्हन्ति-

- ◆ शिक्षकः संस्कृतसम्भाषणशीलः भवेत्। सः कक्षायाम् अन्यत्र चापि संस्कृतभाषया एव वदेत्।
- ◆ शिक्षकः कक्षायामपि मध्ये मध्ये लघून् विनोदप्रसङ्गान्, विनोदकणिकाः महात्मनां जीवनघटनाः वा सरलसंस्कृतभाषया श्रावयेत्। छात्राः यदि तत्र कस्यचिदपि शब्दस्य अर्थं नावगतवन्तः तर्हि शब्देन्तरेण अभिनयेन वा शिक्षकेण सः अर्थः ज्ञापनीयः।
- ◆ पद्यपाठनावसरे आदौ शिक्षकः तत् पद्यं तान् श्लोकान् वा द्विवारं रागसहितं गायेत्। यदि सः गानं न जानाति तर्हि गेयं यथा स्यात् तथा वा पठेत्। तस्मिन् समये छात्राः पुस्तकानि पिधाय एकाग्रचित्ततया तदेव शृणुयुः। तेन कक्षायाम् उत्तमं वातावरणं निर्मितं भवति।
- ◆ आकाशवाण्याः उपयोगः
आकाशवाण्याः केभ्यश्चिद् प्रादेशिककेन्द्रेभ्यः तदा तदा संस्कृतपाठः, संस्कृतनाटकम् इत्यादयः कार्यक्रमाः प्रसार्यन्ते। शिक्षकः तान् पूर्वमेव ज्ञात्वा कक्षायाम् आकाशवाणीयन्त्रस्य उपयोगेन छात्रेभ्यः तान् कार्यक्रमान् श्रावयेत्।

◆ ध्वनिमुद्रिकाणाम् उपयोगः

अधुना तु प्रायः सर्वेषु अपि विद्यालयेषु ध्वनिमुद्रणयन्त्रं, दूरदर्शनं, सङ्गणकम्-इत्यादीनां यन्त्राणाम् उपयोगः क्रियमाणः दृश्यते। यत्र यत्र तत् सौविध्यमस्ति तत्र तत्र संस्कृतशिक्षणाय अपि तस्य पूर्णः लाभः स्वीकर्तव्यः संस्कृतशिक्षकेण।



भाषणम्

पीठिका-असकृत् श्रवणमेव भाषाकौशलसम्पादनस्य प्रथमं सोपानम् इति पूर्वमेव सूचितम्। स्वच्छन्दतया उपयुज्यमानायाः भाषायाः श्रवणं तत्र महत्त्वम् आवहति। यत्र तादृशाः अवसराः न्यूनाः तत्र निर्देशम् अनुसृत्य क्रियमाणं श्रवणं लाभाय कल्पते।

भाषाकौशलेषु द्वितीयं स्थानं भाषणस्य। सर्वेऽपि मनुष्याः स्वीयम् आशयं प्रकटीकर्तुं भाषन्ते एव। किन्तु शब्दोच्चारणमात्रं भाषणं न इति अस्माभिः ज्ञातमेव। कदाचित् उच्चारितेष्वपि शब्देषु यदि शब्दप्रयोगकर्तुः आशयः एव आविष्कृतः न भवति तर्हि तेन भाषितम् इति वक्तुं नोचितम्। अतः भाषणे आशयाविष्कारः अत्यन्तं प्रधानः।

सुसंस्कृते वातावरणे प्रवृद्धानां बालानां मातृभाषायां भाषणकौशलशिक्षणं न क्लेशाय। यतः तादृशानां भाषणं स्पष्टं भवति। तेषाम् उच्चारणं शुद्धं भवति, शब्दसम्पत्तिश्च विपुला भवति। तद्विपरीततया अन्यत्र प्रवृद्धानां बालानां भाषणम् अस्पष्टं भवति। उच्चारणं दोषपूर्णं भवति। तेषां शब्दसम्पत्तिः अपि अल्पीयसी भवति। तादृशानां तु बालानां भाषणकौशलस्य शिक्षणं विद्यालयादेव आरभ्येत।

संस्कृतभाषिवातावरणम् अद्यत्वे प्रायः छात्रैः स्वगृहे परिसरे वा नोपलभ्यतस इत्यतः सर्वेषामपि संस्कृतच्छात्राणां संस्कृतविषयकश्रवणभाषणकौशलयोः शिक्षणस्य आरम्भः विद्यालये एव भवति इति वक्तुं शक्यते। परन्तु तैः कीदृशात् परिसरात् आगतम् इत्यवलम्ब्य तेषां भाषणे स्पष्टता, उच्चारणे शुद्धता वा निर्धार्यते। शब्दसम्पत्तेः निर्धारणेऽपि सः एव अंशः निर्णायकः भवति। बालानां मातृभाषा या कापि भवतु नाम, (भारतीयभाषा) तेषां काचित् संस्कृतशब्दसम्पत्तिः तु भवत्येव। परन्तु ते कदाचित् न जानीयुः यत् स्वेन प्रयुज्यमानाः शब्दाः संस्कृतशब्दाः इति। तथापि सर्वासु अपि भारतीयभाषासु संस्कृतशब्दाः विपुलतया अन्तर्गताः सन्ति एव इत्यतः अज्ञातरूपेणापि महती संस्कृतशब्दसम्पत्तिः तेषु छात्रेषु भवति एव। तस्याः उपयोग कथं करणीयः इति तु शिक्षणीयं भवति।

‘शब्दोच्चारणमात्रं भाषणं न’ इति यद्यपि पूर्वम् उक्तं, तथापि तावता शब्दानां साधूच्चारणस्य महत्त्वं न निराकृतम्। संस्कृतलोके प्रसिद्ध पद्यमिदं परिशीलयाम-

यद्यपि बहु नाधीषे ग्रन्थान् तथापि पठ पुत्र व्याकरणम्।
स्वजनः स्वजनो मा भूत् सकलं शकलं सकृच्छकृत्॥

यद्यपि अत्र व्याकरणाध्ययनस्य महत्त्वं प्रतिपादितं तथापि तत्रापि सकार-शकारयोः उच्चारणावसरे अनवधानवशात् जनैः क्रियमाणं सामान्यदोषमेव मनसि निधाय पद्यकारेण इत्थं स्मारणं कृतमस्ति इति नाविदितं विदुषाम्। अतः अनेन पद्येन साधूच्चारणस्य आवश्यकता अपि प्रतिपादिता भवति।

अधुना तु संस्कृतं बहुनां मातृभाषा नास्ति इत्येतत् वयं जानीमः। तन्नाम ये संस्कृतेन वदन्ति तेषामपि मातृभाषा अन्या काचित् भवति एव। (यद्यपि एषु दिनेषु संस्कृतमातृभाषिणां नूतना काचित् परम्परा आरब्धा अस्ति तथापि सा अत्र न परिगणिता, तस्याः अल्पीयसीत्वात्।) अतः ये संस्कृतेन वदन्ति तेषाम् उच्चारणे मातृभाषायाः उच्चारणशैल्याः प्रभावः भवत्येव। अतः एव समानायाः अपि संस्कृतभाषायाः उच्चारणं भारते प्रतिराज्यमिव भिद्यते। केरलीयस्य, काश्मीरीयस्य गुर्जरदेशीयस्य वा संस्कृतोच्चारणं भिन्नमेव भवति।

अतिप्रसिद्धाः उच्चारणगताः केचन दोषाः एवं संग्रहीतुं शक्यन्ते-

एकस्य वर्णस्य स्थाने वर्णान्तरस्य प्रयोगः।

१। 'श' कारस्य स्थाने 'स' कारस्य प्रयोगः।

यथा -	शुद्धम्	अशुद्धम्
	शिवः	सिवः
	शङ्करः	सङ्करः
	शास्त्री	सास्त्री

२। 'ष' कारस्य स्थाने 'स' कारस्य प्रयोगः।

यथा-	षण्मुखः	सण्मुखः
	षट्	सट्

३। 'व' कारस्य स्थाने 'ब' कारस्य प्रयोगः।

यथा-	वदति	बदति
	वनमाला	बनमाला
	रवीन्द्रः	रबीन्द्रः

४। 'त' कारस्य स्थाने 'ल' कारस्य प्रयोगः।

यथा-	वत्सः	बल्यः
	प्रचोदयात्	प्रचोदयाल्

५। 'द' कार एवं 'ध' कारयोः स्थाने 'ज' कार एवं 'झ' कारयोः प्रयोगः।

यथा-	अद्य	अज्य
	विद्यालयः	विज्यालयः
	अध्यापकः	अझ्यापकः

६। 'ष' कारस्य स्थाने 'ख' कारस्य प्रयोगः।

यथा-	षट्	खट्
	षष्टिः	खष्टिः
	पुरुषः	पुरुखः

७। 'ह' कारस्य स्थाने 'घ' कारस्य प्रयोगः।

यथा-	सिंहः	सिंघः
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८। 'ज्ञ' इत्यस्य स्थाने 'ग्य' इत्यस्य प्रयोगः।

यथा-	ज्ञानी	ग्यानी
	कृतज्ञः	कृतग्यः
	यज्ञः	यग्यः

९। 'य' कारस्य स्थाने 'ज' कारस्य प्रयोगः।

यथा-	यदा	जदा
	यद्यपि	जद्यपि
	योगेन्द्रः	जोगेन्द्रः

'ऋ' वर्णस्य अन्यथा उच्चारणम्।

यथा-	शुद्धम्	अशुद्धम्	अशुद्धम्
	कृष्णः	क्रिष्णः	कुष्णः
	मातृभूमिः	मात्रिभूमिः	मात्रुभूमिः
	संस्कृतम्	संस्क्रितम्	संस्कृतम्

ह्रस्वस्य स्थाने दीर्घस्य उच्चारणम्।

यथा-	राम!	रामा!
	चटक!	चटका!

दीर्घस्य स्थाने ह्रस्वस्य उच्चारणम्।

यथा-	गतवती	गतवति
	पठितवती	पठितवति

महाप्राणस्य स्थाने अल्पप्राणस्य उच्चारणम्।

यथा-	भीमः	बीमः
	फलाहारः	पलाहारः
	वैविध्यम्	वैविद्यम्

अल्पप्राणस्य स्थाने महाप्राणस्य उच्चारणम्। (एतत्तु अज्ञानादपि सम्भवति।)

यथा-	उच्चारणम्	उच्छरणम्
	वैशिष्ट्यम्	वैशिष्ट्यम्

स्थितस्यापि वर्णस्य अनुच्चारणम्।

यथा-	राम!	राम् (अकारस्य अनुच्चारणम्)
	मम	मम्
	नाम	नाम्

अपिद्यमानमपि वर्णं योजयित्वा उच्चारणम् ।

यथा-

स्त्री

इस्त्री

स्नानम्

अस्नानम्

(एतेषु केचन दोषाः भारतस्य केषुचित् राज्येषु श्रूयन्ते । न हि सर्वे दोषाः सर्वेषु राज्येषु, अथवा राज्यविशेषे वा । सामान्यानुभवम् आधारीकृत्य तत्र तत्र श्रुतान् दोषान् सङ्कलस्य एतत् सञ्जीकृतमस्ति । अस्य अपवादाः अपि स्युः एव ।)

यद्यपि संस्कृतोच्चारणे मातृभाषाप्रभावकारणात् जायमानाः एतादृशाः केचन दोषाः क्षम्याः, अङ्गीकारार्हाः इति भासेरन् तथापि तेषां परिहारः एव श्रेयसे ।

भाषणशिक्षणे प्रथमं सोपानं भवति पदानां साधूच्चारणशिक्षणम् । तत्रापि यैः पूर्वं संस्कृतपदानि अधिकतया न श्रुतानि तादृशाः छात्राः कक्ष्यायां भवन्ति इति कृत्वा तेषाम् उच्चारणशिक्षणे संस्कृतशिक्षकेण विशेषावधानं दातव्यम् । यथा यथा वयः अधिकं भवति तथा तथा सर्वेषाम् उच्चारणविषये जिह्वायाः पाटवं न्यूनं भवति इत्यतः अल्पे एव वयसि बालानाम् उच्चारणदोषविषये परिष्कारः कर्तव्यः । संस्कृतशिक्षकाणां तु वर्णोत्पत्तिस्थानानां परिचयः भवत्येव इत्यतः तानि प्रदर्शयामि ते कः वर्णः कथम् उच्चारणीयः इति दर्शयितुम् अर्हन्ति । कक्ष्यायां स्थितेषु छात्रेषु येषाम् उच्चारणं सुष्ठु अस्ति तेषां साहाय्येन अपि अन्येषां परिष्कारे प्रयत्नः कर्तुः शक्यते ।

पूर्वं बहुषु गृहेषु अमरकोषस्य केषाञ्चित् श्लोकानाम्, अन्येषामपि केषाञ्चित् संस्कृतस्तोत्राणां वा कण्ठपाठः नियमेन कार्यते स्म । तत्र प्रवृद्धैः बालैः कदाचित् अग्रे संस्कृतं न पठितं चेदपि तच्च कण्ठपाठनं तेषाम् उच्चारणपरिष्कारे निश्चयेनापि साहाय्यं करोति स्म । कण्ठपाठक्रमः अवैज्ञानिकः, मनश्शास्त्रीयतत्त्वविरुद्धश्च, तेन मस्तिष्कस्य उपरि वृथा भारः आरोपितः भवति इति मन्वानैः कैश्चित् आधुनिकैः सः क्रमः एव तिरस्क्रियते । परन्तु व्यवस्थितरूपेण क्रियमाणः कण्ठपाठः न केवलं वैज्ञानिकः, अपि तु हर्षप्रदः दीर्घकालिकलाभदायकश्च भवति इति न विस्मर्तव्यम् । उच्चारणशुद्धि विषये तु सः सिद्धौषधायते ।

स्वविद्यालये पठतां छात्राणां मुखात् संस्कृतसम्भाषणं कारयितुम् इच्छुकेन शिक्षकेण तदर्थम् आदौ करणीयं कार्यं भवति सम्भाषणशिविरसञ्चालनं नाम । परिमितैः शब्दैः परिमितैरेव क्रियापदैः वाक्यप्रयोगैश्च दैनन्दिनः व्यवहारः कथं निर्वोढव्यः इति सम्भाषणशिविरे पाठ्यते । तत्र प्रदत्तं सम्भाषणकौशलमेव मूलभूतम् आधारं कृत्वा ततः अग्रे भाषणकौशलविकासः सम्पादनीयः । सम्भाषणशिविरसञ्चालनविषये तु संस्कृतभारत्या आयोज्यमानेषु प्रशिक्षणवर्गेषु भागवहनेन शिक्षकः प्रशिक्षणं प्राप्तुम् अर्हति । (शिविरान्तर्गतानां पाठ्यबिन्दूनां संग्रहः संस्कृतभारत्या एव प्रकाशिते 'अभ्यासपुस्तक' नामके पुस्तके लभ्यते । परन्तु प्रशिक्षणवर्गे भागग्रहणं विना पाठ्यबिन्दूनां संग्रहमात्रेण किमपि प्रयोजनं न भवति ।)

सम्भाषणशिविरपाठ्यबिन्दूनां ज्ञानं संस्कृते सम्भाषणकुशलतां प्राप्तुम् इच्छुकेन प्राप्तव्यं प्राथमिकं ज्ञानं भवति । परन्तु ज्ञानमात्रेण सम्भाषणकौशलं न सिध्यति इति तु विदितमेव । तदर्थं निरन्तरम् अभ्यासः एव अपेक्षितः । सन्तताभ्यासेन सम्भाषणे धारावाहिता सिध्यति । सिद्ध्यामपि धाराप्रवाहितायां तावतापि न पर्याप्तम् । यतः भाषणकौशलस्य उद्देश्यं न दैनन्दिनव्यवहारनिर्वाहमात्रम् । तदतिरिक्तानि अपि उद्देश्यानि तस्य भवन्ति । तत्रापि यथाकथञ्चित् न, अपि तु सर्वावगमयोग्यया रीत्या भाषणं कृतं चेदेव व्यवहारनिर्वाहः सुखेन सिध्यति । दोषरहितया भाषया भाषणं, तर्कसङ्गतं यथा स्यात् तथा भाषणं, श्रोतृणाम् आसक्तिवर्धनं यथा स्यात् तथा कथनं, धैर्येण भाषणं, स्वाभिलषितस्य विषयस्य स्वरसतापूर्वकं निरूपणम्, विषयप्रतिपादने तदनुकूलानामेव समुचितशब्दानां प्रयोगकरणम् - इत्यादीनि अपि तदुद्देश्याद भवन्ति ।

भाषणकौशलविकासस्य उपायाः

चिन्त्यतां यत् बालानां गणः कश्चन पुरतः अस्ति, ते च बालाः सम्भाषणशिविरे गृहीतभागाः सन्ति, तत्रत्यान् पाठ्यबिन्दून् जानन्ति इति। ततः अग्रे तेषां भाषणकौशलविकासाय के उपायाः अनुसर्तव्याः इति पृष्टे सति अत्र केचन उपायाः निर्दिश्यन्ते-

१. सम्भाषणम्

भाषणकौशलवर्धनस्य सर्वोत्तमः उपायः नाम सम्भाषणमेव। बालाः यावदधिकं सम्भाषन्ते तावत् भाषणकौशलं प्राप्नुवन्ति। अतः बालाः अधिकाधिकं यथा भाषेरन् तथा प्रोत्साहनीयाः। विद्यालयस्य कक्ष्यायां, क्रीडाङ्गणे गृहे चापि ते अधिकं भाषन्तां नाम। 'कक्ष्यायाम् अवसरे अदत्तेऽपि बालाः परस्परं भाषमाणाः कोलाहलं कुर्वन्ति, अवसरः दत्तः चेत् पुनः का कथा भवेत्?' -इति प्रश्नः भवितुमर्हति। तस्य समाधानं च एवम् - कक्ष्यायामपि मध्ये मध्ये कदाचित् परस्परं निर्बाधं सम्भाषणं कर्तुं छात्रेभ्यः अवसरः दातव्यः। परन्तु तस्मिन् अवसरे तु संस्कृतेन एव सम्भाषणं कर्तव्यम् इति नियमः करणीयः। तं च नियमं सर्वे बालाः पालयन्तः सन्ति, उत न इति मध्ये मध्ये परीक्षणमपि कर्तव्यम्। सामान्यसम्भाषणं कर्तुम् अपेक्षितान् अंशान् ते इदानीमेव जानन्ति इत्यतः सम्भाषणे तेषां क्लेशः न भवति। कदाचित् शब्दाभावः तान् बाधेत। तदा शिक्षकाः तेषां साहाय्यं कुर्यात्। छात्राः भाषणे मध्ये मध्ये दोषान् अपि अवश्य कुर्युः। तथापि प्रेरिताः चेत् ते सम्भाषणं कुर्वन्ति एव। पुनः पुनः सम्भाषणेन भाषणे कुशलतां च प्राप्नुवन्ति।

पाठमध्येऽपि शिक्षकः यदा प्रश्नं पृच्छति तदा छात्राः स्वेन ज्ञातम् अंशं धैर्येण यथा वदेयुः तादृशं वातावरणं कल्पनीयम्।

२. कथाकथनम्

भाषाशिक्षणे कथानां महत् स्थानमस्ति। श्रवणाभ्यासनिमित्तं शिक्षकः कथाः श्रावयेत् इति पूर्वमेव उक्तमस्ति। भाषणाभ्यासनिमित्तं तेन बालानां मुखात् कथाः वाचनीयाः। संस्कृताभ्यासात्पूर्वमपि छात्रैः अन्यभाषासु अनेकाः कथाः श्रुताः पठिताश्च भवन्ति। ताः कथाः कथयितुं शिक्षकेण अवसरः कल्पनीयः। यदि छात्रसंख्या अधिका अस्ति तर्हि छात्रान् गणशः विभज्य प्रतिगणं द्वित्राणां कृते अवसरः दातव्यः। मध्ये मध्ये 'नूतनाः कथाः ज्ञात्वा आगत्य श्रावयन्तु' इति सूचना दत्ता चेत् छात्राः प्रयत्नेन अन्येषां साहाय्येन च नूतनाः कथाः ज्ञात्वा आगच्छन्ति, श्रावयन्ति च। कथाचित्राणां साहाय्येन कथावचनस्य अभ्यासः अपि कारयितुं शक्यते।

३. चित्रपठनम्

किमपि चित्रं प्रदर्श्य तत्सम्बन्धितया शिक्षकः बहुन् प्रश्नान् पृच्छन् छात्राणां भाषणस्य अभ्यासं कारयितुमर्हति। बालाः अपि चित्रं दृष्ट्वा परस्परं तद्विषये प्रश्नोत्तरं कर्तुमर्हन्ति।

४. नाटकाभिनयः

कञ्चित् प्रसङ्गं छात्राणां पुरतः विवृत्य तं प्रसङ्गम् अभिनयेन यथा प्रदर्शयेयुः तथा छात्राः प्रोत्साहनीयाः। कः छात्रः किं पात्रं निर्वहेत् इति निश्चित्य तत्सम्बद्धं सम्भाषणमपि यदि सकृत् पाठ्यते तर्हि छात्राः उत्साहेन नाटकाभिनये प्रवृत्ताः भवन्ति।

५. भाषाक्रीडाः

अनन्त्यकथारचनम्, अपूर्णकथापूरणम् इत्यादीनां क्रीडानां द्वारा अपि भाषणाभ्यासः कारयितुं शक्यते। प्रगतस्तरे तु भाषणम्, आशुभाषणम् इत्यादिकमपि उपयोक्तुं शक्यते।

पीठिका-स्वल्पं संस्कृतज्ञानं येषाम् अस्ति तादृशाः छात्राः प्रविष्टसम्भाषणशिविराः वा संस्कृतेन न भाषन्ते इत्येषः बहूनाम् अनुभवः। संस्कृतं जानन्तोऽपि केचन न भाषन्ते, इच्छायाः अभावात्। जानन्तोऽपि इच्छन्तोऽपि अन्ये केचन न भाषन्ते, दोषभयात्। दोषभयं परित्यज्य ते यथा भाषेरन् तथा कर्तुं शिक्षकः तान्

उद्दिश्य निरन्तरं प्रोत्साहकवचनानि वदेत्। पुनः केचन भवन्ति ये सामान्यव्यवहारार्थं यावदपेक्षितं तावत् संस्कृतं जानन्ति, संस्कृतेन वक्तुम् इच्छन्ति, दोषभयमपि तेषां नास्ति-तथापि ते न वदन्ति। कुतः...? किं वक्तव्यम् इति ते न जानन्ति, तावदेव। “भवन्तः भाषन्तां, भाषन्ताम्” इति शिक्षकस्य कथनमात्रेण बहवः छात्राः न भाषन्ते। कारणम् एतदेव यत् किं भाषणीयम् इत्यस्मिन् विषये तेषां कापि कल्पना न भवति। मातृभाषया इव निर्विषयं जल्पनं कर्तुं ते इतोऽपि समर्थाः न सन्ति। अतः यदि कश्चन विषयः दत्तः भवति, कश्चन अवसरः वा कल्पितः भवति तर्हि ते अवश्यं भाषन्ते एव। एतमेव अंशं मनसि निधाय इतः अग्रिमाः सर्वेऽपि अभ्यासाः विरचिताः सन्ति। शिक्षकः एकैकमपि अभ्यासं प्रथमं पठित्वा आत्मसात्कृत्य ततः कक्ष्यायां छात्राणां द्वारा कारयेत्।

वि.सू. - * भाषणकौशलाभ्यासस्य आरम्भदिनेषु छात्रैः क्रियमाणानां भाषादोषाणां विषये शिक्षकः निर्लिप्तः भवेत्। ते च दोषाः तेन न उद्घाटनीयाः। अशुद्धमपि धैर्येण यथा ते भाषेरन् तथा प्रोत्साहनं तेन कर्तव्यम्।



पठनम्

चिन्त्यतां, भवदीया मातृभाषा तेलुगुभाषा इति। विद्यालये दशाधिकवर्षाणि यावत् सा भाषा भवद्भिः पठिता। सा लिपिः अपि भवद्भिः सम्यग् अभ्यस्ता। तत्रैव पञ्चभ्यः वर्षेभ्यः आङ्ग्लभाषापि भवद्भिः पठिता। त्रिभ्यः हिन्दीभाषा पठिता, वर्षद्वयात् संस्कृतमपि पठितम् - इत्यपि चिन्त्यताम्। अधुना भवतां पुरतः चतस्रः दिनपत्रिकाः सन्ति - एका तेलुगुभाषापत्रिका, अपरा आङ्ग्लेयी, अन्या हिन्दीपत्रिका, पुनरन्या संस्कृतपत्रिका चेति। युगपत् दृष्टासु तासु चतसृषु पत्रिकासु भवतां मनसि कस्याः पत्रिकायाः पठने आदौ प्रवृत्तिः जायते...?

नूनं तेलुगुभाषापत्रिकायाः पठने एव। एवं ननु? परन्तु एवं किमर्थम्? ‘तया भाषया पठितं चेत् सुखेन विषयबोधः भवति’ इति? तदपि यद्यपि सत्यमेव, तथापि प्राथमिकं कारणम् एतदेव यत् भवतां तस्याः लिप्याः पठने या धाराप्रवाहिता अस्ति सा अन्यस्याः लिप्याः विषये नास्ति इति। तत्र कारणमपि एतदेव यत् भवद्भिः जीवने अद्यपर्यदत्तं तेलुगुलिपिनिबद्धानि यावन्ति पृष्ठानि पठितानि न तावन्ति अन्यभाषा लिपिनिबद्धानि पठितानि। यदि अन्यभाषालिपिनिबद्धानि एव अधिकतया भवद्भिः पठितानि स्युः तर्हि निश्चयेनापि भवतां प्रवृत्तिः तद्भाषापत्रिकायां स्यादेव।

तन्नाम यया भाषया अधिकं पठ्यते तस्याः भाषायाः पठने धाराप्रवाहिता सिध्यति इति तात्पर्यार्थः। किम् अधुना संस्कृताध्ययनं कुर्वत्सु संस्कृतपठने तादृशी धाराप्रवाहिता दृश्यते? बाल्ये माध्यमिकविद्यालये पठनावसरे कदाचित् मया ‘स्वताम्रभाजनमन्वेष्टुमसमर्थश्चभवत्’ इत्येतत् वाक्यं महता कष्टेन पठितं यत् तत् अद्यापि मम स्मरणे अस्ति। तादृशं कष्टम् अधुनातनाः छात्राः अपि अनुभवन्ति एव। तत्र कारणम् एतदेव यत् अस्माभिः पर्याप्तमात्रेण छात्राणां पठनाभ्यासः न कारितः।

वस्तुतः कस्यापि जनस्य पठनाभ्यासः स्वाभाविकतया न सिध्यति। सः प्रयत्नेन सम्पादनीयः। कोऽपि मनुष्यः भोजनं विना स्थातुं न शक्नोति बुभुक्षितं तं प्रकृतिरेव भोजने प्रवर्तयति। अतः तेन भोजनस्य अभ्यासः करणीयः नास्ति। परन्तु पठनं न तथा। मनुष्येण एव यत्नपूर्वकं तत्र प्रवृत्तिः सम्पादनीया।

किं नाम पठनम्?

‘साङ्केतिकरूपेण निबद्धानां वर्णानाम् उच्चारणं पठनम्’ इति वक्तुं शक्यते किम्? ‘न केवलं विशकलितानां वर्णानाम्, अपि तु वर्णैः घटितानां पदानाम् उच्चारणम्’ इति, ‘तादृशपदघटितानां वाक्यानां वा सुष्ठु उच्चारणमेव पठनम्’ इति वा कथयितुं शक्यं किम्?

न तथा। वाक्यस्य वाक्यपुञ्जस्य वा सुष्ठुच्चारणमात्रेणापि कश्चन सम्यक् पठति इति वक्तुं नैव शक्यम्। यतः तत्र अर्थावगतिः अपि नितराम् अपेक्षिता एव। तन्नाम पठनक्रियायां साङ्केतिकलिपीनां द्वारा तन्निबद्धस्य शब्दस्य साधूच्चारणपूर्वकं तदभिव्यज्यमानस्य अर्थस्यापि ग्रहणं भवति। न केवलं शब्दार्थस्य, अपि तु तन्निबद्धानां वाक्यानां वाक्यपुञ्जस्य अर्थग्रहणमपि तत्र तावदेव प्रामुख्यम् आवहति। पठ- (व्यक्तायां वाचि) धातोः निष्पन्नस्य ‘पठन’ शब्दस्य यद्यपि सुव्यक्तरूपेण वाचनमेव अर्थः, तथापि भाषाकौशलान्तर्गतस्य पठनस्य तु अर्थग्रहणपर्यन्तमपि अर्थः अस्ति एव।

परन्तु लोके तु तादृशाः प्रयोगाः श्रूयन्ते एव। यथा-

१. रामः भगवद्गीतां पठति।
२. अयं विष्णुसहस्रनामस्तोत्रं पठति।

एतादृशेषु प्रयोगेषु अर्थग्रहणं विनापि क्रियमाणेऽपि वाचने ‘पठति’ इति प्रयोगः। यद्यपि तत्रापि अर्थानुसन्धानम् अपेक्षितमेव, तथापि बहुत्र तन्न सम्भति इत्येषः अस्माकम् अनुभवः।

अद्यत्वे विद्यालयशिक्षणे पठनकौशलविषये अपेक्षितप्रमाणेन अवधानं दीयमानं नास्ति इति सखेदं वक्तव्यं भवति। यद्यपि तदर्थं कश्चन प्रयासः क्रियते, तथापि तन्न पर्याप्तम् इति भासते।

अधुना सामान्यताः सर्वेषु विद्यालयेषु संस्कृतशिक्षणे पठनं यत् प्रवर्तते तत्र एतानि सोपानानि दृश्यन्ते-

१. आदौ शिक्षकेण क्रियमाणम् आदर्शवाचनम्।
२. तत्पश्चात् छात्रैः क्रियमाणम् अनुकरणवाचनम्*।
३. छात्रैः क्रियमाणं मौनवाचनम्।
४. शिक्षकस्य आज्ञाम् अनुसृत्य छात्रैः पुनः क्रियमाणं वाचनम्।

एतानि सोपानानि उत्तमानि एव। एतेषाम् अनुसरणेन लाभः अस्ति एव। परन्तु शिक्षकैः कदाचित् एतेषु अधिकम् अवधानं दत्तं न भवति। तेन छात्राणां समीचीनः वाचनाभ्यासः न भवति। अतः एतेषां विषये एव अत्र विस्तरेण विमृशाम।

आदर्शवाचनम्

भाषणं, पठनं लेखनं वा भवतु, सर्वेषु अपि कौशलेषु आदौ आदर्शरूपं किञ्चित् छात्राणां पुरतः उपस्थापनीयं, यत् दृष्ट्वा छात्राः तथैव अनुकर्तुम् अनुसर्तुं वा शक्नुयुः। पठनकौशलविषये तु आदर्शवाचनाम् अत्यन्तं महत्त्वम् आवहति। अतः आदर्शवाचनं शिक्षकः स्वयमेव कुर्यात्। अग्रे कदाचित् अत्यन्तं समीचीनतया पठतः छात्रस्य मुखादपि तत् कारयितुं शक्येत, तथापि आदौ तु शिक्षकेणैव करणीयं भवति।

आदर्शवाचनसमये शिक्षकेण एते अंशाः अवधातव्याः-

◆ कक्ष्यायां शान्तातायाः रक्षणम्

अनेकेषु विद्यालयेषु प्रतिकक्ष्यं छात्रसंख्या षष्ठ्यधिका भवति । तादृशकक्ष्यासु छात्राः मद्स्वरेणापि किमपि वदन्तः भवन्ति चेत् महान् कलकलध्वनिः श्रूयते ।

पञ्चषाः त्रिचतुराः छात्राः वा सम्भाषमाणाः भवन्ति चेदपि कश्चन कोलाहलः भवति । तेन अन्येषां छात्राणाम् अवधानभङ्गोऽपि भवति । एतादृशे अवसरे शिक्षकेण कृतम् आदर्शवाचनं सर्वैः छात्रैः सम्यक् श्रुतय न भवेत् । अतः शिक्षकः आदर्शवाचनस्य आरम्भात् पूर्वं कक्ष्यायां सम्पूर्णां निश्शब्दतां सम्पादयेत् । सूचीपतनशब्दोऽपि श्रुतिगोचरः यथा भवेत् तादृशी निश्शब्दता (pin-drop silence) सम्पादनीया ।

◆ सर्वेषामपि शब्दानां सुस्पष्टम् उच्चारणम्

शिक्षकः वाक्यस्थानां सर्वेषामपि शब्दानां सुस्पष्टम् उच्चारणं कुर्यात् । केषाञ्चित् शिक्षकाणां तादृशः अभ्यासः भवति यत् ते वाक्यस्य आदिमं भागं सम्यक् उच्चारयन्तोऽपि अन्तिमं भागम् अस्पष्टम् उच्चारयन्ति । केचन वर्णाः उच्चारणावसरे निगीर्णाः इव भवन्ति । सम्यक् न श्रूयन्ते अपि । अतः शिक्षकः नातिशीघ्रं नातिमन्दं वा सावधानतया सर्वान् अपि शब्दान् सुष्ठु पठेत् ।

◆ अल्पप्राण-महाप्राणादीनां च साधु उच्चारणम् अल्पप्राण-महाप्राणयोः ह्रस्वदीर्घयोश्च उच्चारणे सम्भाव्यमानाः दोषाः पूर्वमेव (तृतीयाध्याये) अस्माभिः उदाहृताः । ते दोषाः यथा न भवेयुः तथा शिक्षकः वाक्यानां साधूच्चारणं कुर्यात् । स-श-ष- इत्यादीनाम् उच्चारणे सम्भाव्यमानान् दोषान् अपि परिहृत्य सः आदर्शवाचनं कुर्यात् ।

◆ लेखनचिह्नेषु विशेषावधानपूर्वकं वाचनम्

अल्पविराम-पूर्णविराम-प्रश्नार्थक-आश्चर्यवाचक-उद्धरणचिह्नानि यत्र उपयुक्तानि भवन्ति तत्र तदनुसृत्य अर्थानुसन्धानपूर्वकं वाचनं करणीयम् ।

पठनप्रक्रिया

पठनकौशलस्य वर्धनाय आदौ पठनप्रक्रिया (the process of reading) कथं सम्भवति इत्यस्य विश्लेषणम् अत्यन्तम् आवश्यकं भवति । शब्दः ध्वनिरूपः । लिपिस्तु सङ्केतरूपा । सङ्केतरूपाया लिप्याः दर्शनेन पुनरपि शब्दानां ध्वनिरूपेण अभिज्ञानं, तदभिव्यज्यमानस्य अर्थस्य ग्रहणं चापि सम्भवति अस्याः प्रक्रियायाम् । तन्नाम अस्यां प्रक्रियायाय नेत्रयोः बुद्धेश्च युगपदेव प्रवर्तनं भवेत् । अन्यथा पठितेष्वपि अक्षरेषु अर्थबोधः न भवति । पठनावसरे अस्माकं दृष्टिः वाक्ये स्थितेषु अक्षरेषु किम् एकैकम् अक्षरं क्रमशः गृह्णीतुं उत एकैकं शब्दम्?

आरम्भदशायां यदा तस्याः लिप्याः अधिकः अभ्यासः न भवति तदा तु दृष्टिः एकैकम् अक्षरमेव गृह्णीति । इदमिदानीम् अक्षराभ्यासं कुर्वन् शिशुः कश्चन परिशील्यताम् । 'एषः विनायकः' इति वाक्यमपि सः क्रमशः 'ए... षः... वि... ना... य... कः...' इति उच्चारयति । परन्तु गच्छता कालेन नेत्रयोः ग्रहणसामर्थ्यम् अधिकं भवति । तदा तु दृष्टिः युगपदेव समग्रमपि शब्दं ग्रहीतुं प्रभवति । इतोऽपि अधिके अभ्यासे जाते सति दृष्टिः युगपदेव द्वित्रान् शब्दान् अपि ग्रहीतुं प्रभवति ।

'अर्जुनस्य धनुर्वेदे परमं प्रावीण्यं वीक्ष्याचार्यो द्रोणः परां प्रीतिं गतस्तमुवाच'-

पठनकौशलवर्धनं कथम्?

संस्कृतपठनकौशलं वर्धनीयम् इति यदा विचारः क्रियते तदा प्रश्नः उत्पद्यते-‘केषाम्?’ इति। ‘छात्राणाम्’ इत्यत्र नास्ति विमतिः। परन्तु छात्राणां पठनकौशलवर्धनं करणीयं चेत् तत्पूर्वं शिक्षकस्यापि पठनकौशलं वर्धेत एव। संस्कृतशिक्षकाणां संस्कृतपठनकौशलं सर्वत्रापि तृप्तिदायकम् अस्ति इति वक्तुं नैव शक्यम्। अतः आदौ शिक्षकाः स्वयं पठनकौशलविषये प्रावीण्यं प्राप्नुयुः।

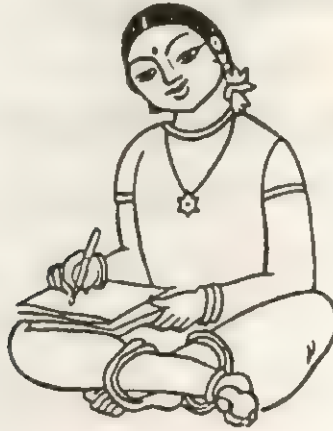
□ पठनकौशलं पठनादेव सिध्यति

यथा सम्भाषणकौशलं सम्भाषणादेव सिध्यति तथा पठनकौशलमपि पठनादेव सिध्यतिः नास्ति उपायान्तरम्। अतः संस्कृतशिक्षकः संस्कृतनिबद्धम् अधिकं पठेत्।

छात्राणां पठनाभिरुचिवर्धनाय शिक्षकैः अवश्यम् अनुसरणीयाः अंशाः एते भवितुम् अर्हन्ति-

- पठनस्य प्रयोजनादिविषये कक्ष्यायां मध्ये मध्ये छात्रैः सह चर्चा करणीयाः।
- उत्तमानि पुस्तकानि तदा तदा कक्ष्यां प्रति नीत्वा दर्शनीयानि। तद्विषये चर्चा अपि करणीया।
- छात्रेभ्यः ग्रन्थालयस्य उपयोगाय अधिकः समयः कल्पनीयः।
- विद्यालयस्य ग्रन्थालयं प्रति तदा तदा छात्राः नेतव्याः।
- ‘अमुकपुस्तकस्थाम् अमुककथां पठित्वा मां वदन्तु’ इति छात्राः तदा तदा प्रेरणीयाः।
- छात्रैः पठितस्य पुस्तकस्य विषये द्वित्राः वा प्रश्नाः प्रष्टव्याः।
- सार्वजनिकग्रन्थालयस्य सदस्यत्वं स्वीकर्तुं छात्राः प्रीत्साहनीयाः।

लेखनम्



स्वाभिलषितस्य अभिप्रायस्य विचारस्य वा प्रकाशनाय लिपिम् आश्रित्य क्रियमाणः अक्षरविन्यासः एव लेखनम् इति पूर्वमेव प्रतिपादितम्। लिख-(अक्षरविन्यासे) धातोः निष्पन्नः लेखनशब्दः यद्यपि अक्षरविन्यासमात्रमपि बोधयति, तथापि अत्र तु स्वाभिलषितस्य प्रतिपादनाय क्रियमाणः अक्षरविन्यासः इत्यर्थः एव गृह्यतेः अन्यथा भाषाशिक्षणे तस्य विशेषप्रयोजनं न भवति। अर्थावगतिं विनापि अस्माभिः कदाचित् लेखनं क्रियते। विद्यालये आरम्भदिनेषु छात्राः प्रतिलिपिलेखनरूपेण (copy-writing) यत् लिखन्ति तत्र यद्यपि अर्थावगतिरपि अपेक्षिता तथापि बहवः छात्राः तद्विनैव कथमपि लेखनकार्यं समापयन्ति इत्येषः अस्माकम् अनुभवः। परन्तु तस्यापि किञ्चित् फलम् अस्ति एव। तेन लिपिसौष्टवं सिध्यति इत्यतः तदपि न निरर्थकम्। परन्तु तत्र यदि अर्थावगतिरपि अन्तर्भवति तर्हि महते लाभाय।

स्वाभिलषितम् अभिप्रायं विचारं वा प्रकाशयितुं लेखनं क्रियते इत्युक्तम् । परन्तु लिपिज्ञानमात्रेण साक्षात् तादृशं लेखनं कर्तुं नैव शक्यम् । तदर्थं क्रमबद्धः सुव्यवस्थितः च अभ्यासः अपेक्षितः भवति । अभ्यासेनैव कौशलं सिध्यति इति पूर्वमपि प्रतिपादितमेव । विशकलितानां, परस्परं सम्बन्धरहितानां वा वाक्यानां लेखनतः आरब्धः अपि सः अभ्यासः क्रमशः वर्धमानः प्रबन्धलेखनपर्यन्तमपि यदि अनुवर्तिष्यते तर्हि अभ्यासकर्ता स्वाभिलषितविषयप्रकाशनसमर्थमपि लेखनकौशलम् आत्मसात्कर्तुं प्रभविष्यति ।

छात्राणां लेखनकौशलविकासस्य उपायाः

- ◆ लेखनक्रमज्ञापनाय शिक्षकाः कृष्णफलकस्य उपयोगम् अधिकाधिकं करोतु । लेखनावसरे एव लेखनक्रमः अपि सर्वेषां दृष्टिगोचरः यथा भवेत् तथैव लिखतु । तन्नाम लेखनसमये कृष्णफलकं छात्रैः यथा न दृश्यते तथा अपवार्यं मा तिष्ठतु ।
- ◆ लिपिशिक्षणाय यः गृहपाठः दीयते तदतिरिक्तरूपेणापि तदा तदा छात्रेभ्यः तादृशं किमपि लेखनकार्यं ददातु, यच्च यान्त्रिकं जामिताजनकं वा न भवेत् ।
- ◆ येषां प्रश्नानाम् उत्तरं पाठ्यपुस्तकस्थं वाक्यं न, अपि तु छात्रैः विचिन्त्य रचनीयं स्ववाक्यं भवति तादृशान् अपि प्रश्नान् तदा तदा गृहपाठरूपेण पृच्छतु ।
- ◆ छात्राणाम् अनुभवगोचरं विषयम् अवलम्ब्य तेषां द्वारा तदा तदा सम्भाषण-लेखनम्, लघुनिबन्धलेखनं वा कारयतु ।
- ◆ छात्राणां मध्ये तेषां मित्राणां मध्ये च संस्कृतभाषया पत्रव्यवहारस्य अभ्यासं कारयतु ।
- ◆ विरामप्रार्थनापत्रम् अन्यविधम् आवेदनपत्रं च संस्कृतेन लेखितुं छात्रान् प्रेरयतु ।
- ◆ संस्कृतेन दैनन्दिनीलेखनं कथं करणीयमिति शिक्षणं ददातु । प्रतिदिनं तथा लेखनाय तान् प्रेरयतु ।
- ◆ संस्कृतपत्रिकाभ्यः प्रतिस्पन्दः, अनुभवः, विनोदः, वार्ताः-इत्यादीनां लेखनाय छात्रान् प्रोत्साहयतु ।

সংস্কৃত-ভাষা শিক্ষণের নতুন শৈলী

ডঃ রুমা বন্দ্যোপাধ্যায়

রীডার, সংস্কৃত বিভাগ

বাসন্তী দেবী মহাবিদ্যালয়, কলকাতা

সংস্কৃতভাষা অধিকাংশ ভারতীয় ভাষারই জননীস্বরূপ। ঋণ স্বীকার করুক না করুক প্রায় সব কটি ভারতীয় ভাষাই সংস্কৃত ভাষা থেকে দান গ্রহণ করেছে দুহাতে অঞ্জলি ভরে। সন্তান সাবালক হলে যেমন সর্বদা পিতামাতার হাত ধরে চলার প্রয়োজন হয় না। ঠিক তেমনি কোন ভাষা স্বাবলম্বী হয়ে উঠলে তাকে আর মূল ভাষার ওপর নির্ভরশীল হয়ে থাকতে হয় না। যেমন বন্ধিমচন্দ্র চট্টোপাধ্যায়ের সময়ের বাংলা ভাষাকে যতটা সংস্কৃত ভাষার উপর নির্ভর করে এগোতে হয়েছে বর্তমান বাংলাভাষাকে আর ততটা সংস্কৃত ভাষার মুখাপেক্ষী হয়ে থাকতে হয় না। সুতরাং পাঠক্রমে বর্তমানে সংস্কৃত থাকুক অথবা না থাকুক তাতে বাংলা ভাষার ধারক বা বাহকগণের খুব একটা মাথাব্যথা নেই। কিন্তু আমরা যারা সংস্কৃত ভাষার ছাত্র অথবা শিক্ষক অর্থাৎ সংস্কৃতজীবী, আমাদের এই ভাষার প্রতি একটা দায়বদ্ধতা নিশ্চয়ই আছে। আমাদের কর্তব্য হবে নতুন নতুন শিক্ষণপ্রণালী প্রয়োগ করে সংস্কৃত ভাষার শিক্ষাকে আরো আকর্ষণীয় করে তোলা, যাতে ছাত্র-ছাত্রীগণ বিষয়টি সম্বন্ধে আগ্রহী হয়। বর্তমান প্রবন্ধে সংস্কৃত শিক্ষণের ব্যাপারে কয়েকটি পরামর্শ দেওয়া যেতে পারে। যেমন—

- ১। মাতৃভাষার মধ্যে যে সমস্ত তৎসম শব্দের প্রয়োগ আছে, সেইগুলো অঙ্গুলিনির্দেশ করে দেখানো এবং উৎস হিসেবে সংস্কৃত ভাষা সম্বন্ধে কিঞ্চিৎ আলোচনা।
- ২। সপ্তম, অষ্টম শ্রেণীর পাঠক্রমের মধ্যে কালিদাস, ভবভূতি প্রমুখ কবিদের নাম এবং তাঁদের কোন রচনা গল্প হিসেবে ছাত্র-ছাত্রীদের সামনে উপস্থিত করা।
- ৩। সংস্কৃত ভাষার উচ্চারণ ও ছন্দ যতটা সম্ভব খেয়াল রেখে পড়ানোর ফাঁকে ফাঁকে দু-একটি শ্লোক কথাপ্রসঙ্গে ছাত্রদের সামনে উপস্থাপিত করা।
- ৪। সুভাষিত বা শ্রীমদ্ভগবদ্গীতা থেকে ৩টি অথবা ৫টি শ্লোক বিদ্যালয়ের প্রতিযোগিতার বিষয়ের মধ্যে আবৃত্তির জন্য নির্দিষ্ট করা।
- ৫। সংস্কৃত বিষয় পড়ানোর সময় বোর্ডে ‘সত্যমেব জয়তে’ বা ‘অয়মারম্ভঃ শুভায় ভবতু’ এই ধরনের কোন ছাত্রোপযোগী উপদেশ সম্ভব হলে দেবনাগরী হরফে লিখে রাখা।
- ৬। দেবনাগরী হরফ শিখতে পারলে ছাত্র-ছাত্রীরা হিন্দী হরফ অনায়াসে পড়তে পারবে — এ সম্পর্কে ছাত্র-ছাত্রীদের অবহিত করা।

- ৭। রবীন্দ্রসঙ্গীত, নজরুলগীতি, দ্বিজেন্দ্রগীতি অথবা যে কোন পরিচিত সংস্কৃতানুবাদ ছাত্র-ছাত্রীদের (সম্ভব হলে ১টি, সময়ভাবে স্থায়ী, আরও সময়ভাবে প্রথম পংক্তি) শেখানো।
- ৮। ছোট ছোট ৪ লাইন বা ৮ লাইনের স্তব, স্তুতি বা সংস্কৃত ভাষায় যে কোন সঙ্গীত স্বল্প মূল্যের পুরস্কার দিয়ে হলেও ছাত্র-ছাত্রীদের মধ্যে প্রতিযোগিতার জন্য নির্দিষ্ট করা।
- ৯। সংস্কৃত ভাষায় সঙ্গীত, নাটক ইত্যাদি বেতার, দূরদর্শনে যখন হয় সেই সময়টি জানিয়ে দিয়ে ছাত্র-ছাত্রীদের সেদিকে আকৃষ্ট করা।
- ১০। সংস্কৃত সাহিত্য পরিষদ, সংস্কৃত কলেজ, হাওড়া সংস্কৃত সাহিত্য সমাজ বা এশিয়াটিক সোসাইটির মত প্রতিষ্ঠান যেখানে যেখানে সংস্কৃতে সারা বছর অনুষ্ঠান হয়, সম্ভব হলে সেখানে ছাত্র-ছাত্রীদের নিয়ে যাওয়া।
- ১১। সপ্তম ও অষ্টম শ্রেণী এই দুই বৎসর শিক্ষা চলাকালীন নানাভাবে সংস্কৃত ভাষা নিয়ে পড়াশুনো করলে কি কি সুযোগ ভবিষ্যতে পাওয়া যেতে পারে, সে সম্পর্কে ছাত্র-ছাত্রীদের অবহিত করা।
- ১২। বর্তমান জীবনের সঙ্গে মেলে সেই ধরনের বাক্য অনুবাদের জন্য নির্দিষ্ট করা।
- ১৩। সংস্কৃত ভাষা নিয়ে অধ্যয়ন করে বিশ্ববিদ্যালয়ের অধ্যক্ষ বা মন্ত্রী থেকে শুরু করে যারা যারা প্রতিষ্ঠিত হয়েছেন, তাঁদের কথা প্রসঙ্গক্রমে উপস্থাপিত করা।
- ১৪। ছাত্র-ছাত্রীদের ক্ষমতা ও পরিবেশ অনুযায়ী যে কোন পদ্ধতিই সংস্কৃতির উন্নতিকল্পে অভিজ্ঞ শিক্ষক-শিক্ষিকাগণ ব্যবস্থা নিতে পারেন।

সংস্কৃত-ভাষা শিক্ষার গ্রহণযোগ্য পদক্ষেপ

অধ্যাপিকা মঞ্জুলিকা রায়

সভ্যতা ও শিক্ষায় ভারতবর্ষ সমগ্র বিশ্বের প্রাচীন সভ্যতাগুলির অন্যতম। আর্য সভ্যতার ব্যাপ্তি ঘটে উত্তর ভারতে এবং তা প্রকৃতপক্ষে হরপ্পা সভ্যতার প্রতিদ্বন্দ্বী হিসাবে বৈদিক শিক্ষা প্রচারে।

প্রথাগত শিক্ষা ব্যবস্থার সম্প্রসারণ ঘটে চতুর্বর্ণ ও চতুরাশ্রম ব্যবস্থার প্রচলনের ফলশ্রুতি হিসাবে। আরণ্যক মুনি ঋষিদের তত্ত্বাবধানে বৈদিক শিক্ষার প্রসার ঘটে আবার রাজন্যবর্ণের পৃষ্ঠপোষকতায় মঠ, আশ্রম, গুরুকুল, পাঠশালা প্রভৃতি স্থানে বিদ্যাবিস্তারের কেন্দ্র হয়। তক্ষশিলা, উজ্জয়িনী, পাটলীপুত্র প্রভৃতি উচ্চশিক্ষার কেন্দ্র হিসাবে খ্যাতিলাভ করে।

সে যুগে গুরু-শিষ্যের সম্পর্ক ছিল অতি নিগূঢ়। কিন্তু শিষ্যত্ব গ্রহণের আগে বিদ্যার্থীকে নানাবিধ পরীক্ষা প্রদান করতে হত। অধিকাংশ শিক্ষা গুরুমুখী এবং জ্ঞাননির্ভর। শিক্ষার্থীকে গুরুগৃহে কর্মবহুল জীবন যাপন করতে হত। কিন্তু শিক্ষা জীবনমুখী বা বাস্তবানুগ ছিলনা।

যে সব বিদ্যার্থী দুর্বল স্মৃতিশক্তির অধিকারী ছিল, তাদের অনুপপত্তি দূর করার জন্য অন্য কোন উপায় গ্রহণ করা হত না। গুরুভীতি বা বিষয়ের কাঠিন্য অনেককেই বিদ্যাগৃহের প্রাঙ্গণ থেকে দূরে সরিয়ে নিয়ে যেত। গুরুশিষ্যের সম্পর্কের মধ্যে যে ব্যবধান ছিল তা কখনোই বন্ধুত্বের পর্যায়ে পর্যবসিত করা যেত না। এতদ্ভিন্ন জাতিভেদ ও সামাজিক প্রয়োজনে শিক্ষা ব্যবস্থা ছিল পৃথক এবং তাও সার্বজনীন ছিল না। শিক্ষার অধিকার থেকে অনেকেই বঞ্চিত থাকতো।

আজ আমরা যে শিক্ষা ব্যবস্থার কথা আলোচনা করি সেটাই যে সর্বতোভাবে ত্রুটিমুক্ত তা জোর দিয়ে বলা যাবে না। তবু কিছু কিছু অংশে যাতে তাকে ত্রুটিমুক্ত করা যায় সে বিষয়ে আমাদের সচেতন হতে হবে।

যুগের পরিবর্তন হয়েছে, শিক্ষা হয়েছে সার্বজনীন সহজলভ্য কিন্তু সংস্কৃত শিক্ষা তার গৌরব ও মর্যাদা হারিয়েছে। কাঠিন্যের দিকটি তুলে ধরে সংস্কৃত শিক্ষাকে ক্রমশঃ সাধারণ মানুষের কাছ থেকে দূরে সরিয়ে দেওয়ার চেষ্টা করা হয়েছে। আমরা মনে করি সংস্কৃতকে কাঠিন্যমুক্ত করে জনপ্রিয় করে তোলার প্রয়োজন, নচেৎ ভারতীয় অন্যান্য আধুনিক ভাষাও অচিরেই তাদের মর্যাদা হারাতে পারে।

বিদ্যালয় শিক্ষা আজ আর একমুখী প্রক্রিয়া নয়। শিক্ষার্থীর কুতূহলীর মনকে, তাদের ইন্দ্রিয়গুলিকে আকৃষ্ট করে সংস্কৃত-শিক্ষাকে সহজলভ্য করে তোলার সময় এসেছে। সংস্কৃত শিক্ষককে এগিয়ে এসে বিভিন্ন কৌশলকে কাজে লাগিয়ে সংস্কৃতের হাত গৌরব কে ফিরিয়ে আনতে হবে।

শিক্ষার কেন্দ্রে রয়েছে শিক্ষার্থী। পাঠ্যপুস্তকের অন্তর্গত নূতন জ্ঞানের ভান্ডারকে তাদের কাছে পৌঁছে দেওয়ার কাজ করেন শিক্ষক। শিক্ষক হবেন বিষয়ের প্রতি শ্রদ্ধাশীল এবং সমভাবে শিক্ষণপ্রাপ্ত শিক্ষার বিভিন্ন দিক সম্বন্ধে সম্যকভাবে সচেতন।

শিক্ষালয় শিক্ষাদান পর্বের কর্মভূমি। প্রধান সহায়ক হবেন প্রধান শিক্ষক। বিষয় নির্বাচনের ক্ষেত্রে মনোবিজ্ঞানসম্মত যুগোপযোগী এবং ব্যোপযোগী পাঠ্যপুস্তক নির্বাচন করতে হবে। তৎসঙ্গেও লক্ষ্য রাখতে হবে — যাতে পাঠ কেবলমাত্র পাঠ্যপুস্তকনির্ভর হবে না। জীবনকেন্দ্রিক এবং বাস্তবসম্মত পাঠ শিক্ষকের সহায়তায় যেন যথাযথভাবে মনোজ্ঞ হয় সেদিকে লক্ষ্য রাখতে হবে।

ঋপদী ভাষা সংস্কৃত সাহিত্যরস সমৃদ্ধ — তাই এবং ব্যাকরণের ওপর অধিক গুরুত্ব না দিয়ে রসস্নিগ্ধ অংশটিকে ছাত্র-ছাত্রীদের কাছে পরিবেশন করতে হবে। শিক্ষার্থীদের বাচনিক দক্ষতা বৃদ্ধি করে পাঠে উৎসাহিত করতে হবে। দুরাহত ও অনাবশ্যক অংশগুলি পরিহার করে প্রাথমিকভাবে আনন্দজনক ও শিল্পনৈপুণ্যমূলক রচনাগুলির সঙ্গে তাদের পরিচয় সাধন করা প্রয়োজন হবে।

সার্থক সংস্কৃত পাঠদান করার জন্য শিক্ষার্থীর পূর্ব অভিজ্ঞতাকে সম্বল করে আয়োজন পর্বটি সম্পন্ন করা হবে। দৈনিক পাঠকে একক হিসাবে গ্রহণ করে তাকে শিক্ষার্থীর সামনে উপস্থাপিত করতে হবে। সহজ উপায় অবলম্বন করে প্রশ্নোত্তর পদ্ধতিতে পাঠসহায়ক উপকরণের সাহায্য নিয়ে পাঠকে মনোজ্ঞভাবে বিশ্লেষণ করতে হবে। অবশেষে সংশ্লেষ পদ্ধতি পাঠকে সম্পূর্ণতা দান করবে।

সমগ্র পাঠের প্রতিটি অংশকে বিভাজিত করে আলোচনা করার নামই অনুশিক্ষণ বা “মাইক্রোটিচিং”। এই অনুশিক্ষণ শুধু বিজ্ঞানসম্মতই নয় — মনোবিজ্ঞান সম্মতও বটে।

যেসব শিক্ষক শিক্ষিকা সংস্কৃত শিক্ষাদানের দায়িত্ব নিতে এগিয়ে এসেছেন, আমরা চেষ্টা করব তাঁদের আধুনিক, বৈজ্ঞানিক ও মনোবৈজ্ঞানিক সত্তার সমৃদ্ধ করার। আজকের এই কর্মশালা এমনই এক প্রক্রিয়ার দিগদর্শন ঘটাতে বলে আশা রাখি।

समासेन सत्रविषयकम् अध्यापिका गीता मुखोपाध्याय

एषातीव सुखावहा वार्ता यदस्मिन् महाविद्यालये मे मासस्य चतुर्विंशतिपञ्चविंशतिश्च दिवसद्वयं व्याप्य “संस्कृतभाषा शिक्षणविषये नवापद्यतिः” इति विषयमबलम्व्य कर्मशालैका आयोजिता। सत्रेऽस्मिन् बहुविविधा जनाः समागताः।

पूर्वमेव जीविकाप्राप्तानां दशसंख्यकानां शिक्षकशिक्षिकानां कृते दिवसद्वयार्थमायोजिता कर्मशाला। श्रीमती रूमा वन्द्योपाध्यायमहाशया उद्बोधनगीतमगायत्। तत्र खलु प्रथमदिवसे प्रधानातिथिरूपेण तत्रभवान् श्रीयुक्तः अध्यापकोशधिकर्ता च वैदिकसाहित्यविषयकपाठस्य रवीन्द्रभारतीमहाविद्यालयस्य अलंकृतः। स तु समासेन संस्कृतभाषायाः पारम्पर्यं धारावाहिकतां च संरक्ष्य वैदिकयुगादारम्भ वर्तमानकालं यावत् संस्कृतस्य उपयोगितां वर्णितवान् अंशग्रहणकारिनः शिक्षकौ शिक्षिकाश्च संस्कृतपाठने उज्जीक्यामास।

प्रदीपप्रज्वलनेन अनुष्ठानस्य शुभारम्भो विहितः। प्रतिष्ठानाध्याक्षा खलु शिक्षकशिक्षिकाप्रशिक्षणकेन्द्रस्य विशिष्ट्यानि पाठनस्य च उद्देश्यानि सम्यक् सर्वसमक्षे विज्ञापितवती। ततः वैदिकमन्त्रेण अतिथिवरणं कृतम्। ये खलु याः तस्मिन् दिवसे प्रशिक्षापनार्थमागताः तेषाम् मध्ये श्रीरामकृष्णमिशनप्रतिष्ठानस्य आचार्यप्रवरः तन्म्यकुमार भट्टाचार्यः महोदयः, वासन्तोदेवीति महाविद्यालयस्य संस्कृताध्यापिका श्रीमती रूमा वंद्योपाध्यायमहाशया अल वेङ्गल टिचासंटेणि-इति प्रतिष्ठानस्य संस्कृतविभागस्य अध्यापिका महीयसी मञ्जुलिका रायमहोदया च उपस्थिताः आसन्। ते सर्वे यथाक्रमेण संस्कृतभाषणपद्धतिं संस्कृतशिक्षणपद्धतिमनुशिक्षणञ्चाधिकृत्य एकैकशः प्रशिक्षणकर्मशालायाः उद्देश्य माहात्म्यं च स्पष्टीकृतवन्तः। दिवसद्वयस्य कार्यावली द्विधा विभक्तासीत्। प्रथमदिवसे उद्बोधनपर्वः द्वादशहोरां यावत्, ततः चापानाम्, ततश्च श्रेणीकक्षे प्रशिक्षणविषयकमध्यापनम्। एक एक पाठ्योकादिनिर्माणं कृतमंशकारिभिः शिक्षकैः। सार्धचतुष्टयघटिका यावत् प्रथमदिवसस्य कार्यं चलितम्। ततः कफिपानम्। तद्विवसकार्यावसानं च घोषितम्।

परस्मिन् दिवसे गुरुवासरे यथासमये सत्रस्य कार्यं चलितम्।

प्रत्येकशिक्षिका प्रशिक्षणार्थी एकैकशः त्रिविधं स्वकीयशिक्षणपद्धतिं प्रकाशितवती। प्रशिक्षकानां मध्ये द्वौ शिक्षकौ अप्यास्ताम्। प्राज्ञविवुधास्तेषां नवपद्यत्या शिक्षादानक्रियामालोक्य सम्यक् समालोचितवन्तः उन्नयनोपायं च निर्दिष्टवन्तः।

कृष्णफलके अनुशिक्षणपद्यत्यां एकैकदक्षतामबन्ध्य प्रशिक्षणार्थी शिक्षणपद्धतिं वर्णयामास। एतेन महदुपकृता आसन् अंशग्रहणकारिणः छात्राः। एवं द्वितीयदिवसस्य प्रथमार्धस्य कार्याणि अवसितानि।

द्वितीयदिवसे द्वितीयाह्ने समाप्त्यनुष्ठाने धन्यवादज्ञापनकार्यं खलु विहितम्। अध्यक्षा महोदया कर्मशालायाः साफल्यम् उदघोष्य सुशिक्षणस्य गौरवम् प्रतिपादितम्। संयोजिका गीता मुखोपाध्याया सत्रस्य आह्वयिका सर्वान्

अंशग्रहणकारिणः उद्दिश्य संक्षिप्तभाषणं प्रपदे । श्रीरामकृष्णमिशनवरानगरस्थितस्य विद्यालयस्य शिक्षकः श्रीवटुकनाथ
भट्टाचार्यमहाशयः च तस्य अनुभूतिं स्वच्छन्दं सानन्दं वर्णयामास । प्राज्ञः जनः स्वीकरोति यत् कर्मशालायामागमनात्
प्राक् तेनाज्ञातमासीत् एव कर्मशालायामधीता पद्धतिः । प्रशंसापत्रं दत्तमध्यक्षया महोदयया । ततः समाप्तम् ।

प्रशिक्षणशालायाः उद्देश्यं खलु-

प्रथमतः संस्कृतस्य पुनरुज्जीवनं हतगौरवपुनरुद्धारश्च

द्वितीयः संस्कृतं जनप्रियताकरणम्

तृतीयतः संस्कृतशिक्षिकाः खलु शिक्षादानकर्मणि स्वतोत्सारिता भवेयुः यथार्थं च शिक्षादानार्थम् अनुप्रेरिताः स्युः

सर्वे सुखिनः सन्तु सर्वे सन्तु निरामयाः - हति ।

सर्वे भद्राणि पश्यन्तु मा कश्चित् दुःखमाक् भवेत् ॥

“কিছু কথা”

শ্রীমতী গীতা মুখোপাধ্যায়

অধ্যাপিকা

হেষ্টিংস হাউস

২০০৬-এর মে মাসের ২৪-২৫ তারিখে C.T.E. আয়োজিত Re-orientation Programme for Sanskrit (In service Teachers Training Programme) অনুষ্ঠিত হয় ‘ইনস্টিটিউট অব এডুকেশন ফর উইমেন’ — এই শিক্ষায়তনে ২ দিনের জন্য। ১০ জন চাকুরি প্রাপ্ত শিক্ষিকাকে এই জন্য আমন্ত্রণ জানানো হয়। রবীন্দ্র ভারতী বিশ্ববিদ্যালয়ের School of vedic studies-এর অধিকর্তা শ্রীযুক্ত নবনারায়ণ বন্দ্যোপাধ্যায় প্রধান অতিথির পদ অলঙ্কৃত করেন। তাঁর ভাষণে তিনি হীনমনোভাবগ্রস্ত সংস্কৃত শিক্ষক-শিক্ষার্থীদের সাময়িক সংকোচভাব কাটানোর জন্য সংস্কৃত ভাষা ও সাহিত্যের মহিমময় দিকটি তুলে ধরেন। ঐতিহ্যগত সংস্কৃতের গুরুত্ব পরম্পরাক্রমে ব্যাখ্যা করতে করতে সাম্প্রতিক সংস্কৃতানুরাগী ছাত্রীদের বর্দ্ধিত সংখ্যার কথাপ্রসঙ্গে উপস্থিত শিক্ষিকা শিক্ষার্থীদের সংস্কৃত ভাষা ও সাহিত্য শিখবার জন্য প্রাসঙ্গিকভাবে তিনি উজ্জীবিত করেন।

নবপদ্ধতিতে সংস্কৃত শিক্ষা বা পক্ষান্তরে সংস্কৃত শিখনের নবপদ্ধতি —এই ছিল প্রশিক্ষণের বিষয়। তিনজন বিশিষ্ট সংস্কৃত শিক্ষক উক্ত বিষয়ের উপর তাদের নিজস্ব সুচিন্তিত মতামত বিশেষভাবে ব্যাখ্যাসহ আলোকপাত করেছিলেন —এবং পদ্ধতিগুলিকে কিভাবে সুষ্ঠু প্রয়োগের মাধ্যমে সংস্কৃতকে আরও সহজ, সাবলীল ও প্রাণবন্ত করে তোলা যায় সে বিষয়ে সবিশেষ প্রয়ত্ত্ব পরায়ণ ছিলেন —প্রশিক্ষণার্থী শিক্ষকশিক্ষিকারাও তাদের স্বনির্মিত চার্ট ইত্যাদি প্রদর্শন সহযোগে এখানে শিক্ষিত পদ্ধতির মাধ্যমে শিক্ষণীয় বিষয়কে সাফল্যের সঙ্গে সর্বসমক্ষে তুলে ধরেছিলেন।

বিশেষজ্ঞ শিক্ষকদের মধ্যে ছিলেন রামকৃষ্ণ মিশন ‘ইনস্টিটিউট অব কালচারের অভিজ্ঞ শিক্ষক শ্রীযুক্ত তন্ময় ভট্টাচার্য। Functional Sanskrit-এর উপর বিশেষ গুরুত্ব দিয়ে slide, OHP, ইত্যাদি প্রদর্শনের মাধ্যমে সংস্কৃতশিক্ষাকে দৈনন্দিন জীবনের সঙ্গে মিলিয়ে মিশিয়ে কিভাবে প্রাণবন্ত করে তোলা যায় তার উপর সবিশেষ গুরুত্ব তিনি আরোপ করেছেন। তাঁর উপস্থিতিতে প্রশিক্ষণার্থী শিক্ষক-শিক্ষিকারাও পরস্পর Functional Sanskrit মাধ্যমে কথোপকথন থেকে শুরু করে আখ্যান উপদেশ কাব্যাদি পাঠ করা যায় সে বিষয়ে যত্নপরায়ণ ছিলেন। এ.বি.টি.টি. কলেজের অধ্যাপিকা শ্রীমতী মঞ্জুলিকা রায় Micro Teaching Skill ব্যবহার করে কিভাবে শ্রেণীশিক্ষণ পদ্ধতিকে আরও সহজ ও যুক্তিসঙ্গত করে তোলা যায় সে বিষয়ে বিশেষ শিক্ষা দিয়েছিলেন। বিদ্যালয়পাঠ্য বিষয়কে কি করে পুঙ্খানুপুঙ্খরূপে অনুশিক্ষণ পদ্ধতির মাধ্যমে চিত্তাকর্ষক করে তোলা যায় তার প্রতি তিনি সবিশেষ যত্নবতী ছিলেন। অংশগ্রহণকারিণী শিক্ষক শিক্ষিকারাও প্রত্যেকে এক এক করে উক্তপদ্ধতি অনুসরণ করে চার্ট ইত্যাদি সহযোগে পাঠনে উদ্যোগী হয়েছিলেন। বাসন্তী দেবী কলেজের সংস্কৃত বিভাগের অধ্যাপিকা সংগীতনিপুণা ডঃ শ্রীমতী রুমা বন্দ্যোপাধ্যায় সংগীতের মাধ্যমে সংস্কৃত শিক্ষণপদ্ধতিকে কিভাবে কাছে টানা যায়

ও ছাত্রছাত্রীদের কাছে আকর্ষণীয় ও গ্রহণীয় করে তোলা যায় সেবিষয়ে নিজে গান করে দেখিয়ে ছিলেন। পরে এই তিনজন Resource Person প্রশিক্ষণার্থীদের প্রদর্শিত পদ্ধতির মূল্যায়ন করেছিলেন। প্রশিক্ষণার্থীদের মধ্যে কোন কোন শিক্ষক ও শিক্ষিকা তাদের নবলব্ধশিক্ষাপদ্ধতি ভবিষ্যতে কিরূপ সহায়ক হতে পারে ও সেদিন কিভাবে তারা শিক্ষিতপদ্ধতিকে কাজে লাগাতে শিখেছে ও তার দ্বারা উপকৃত হয়েছে সে বিষয়ে তাদের বক্তব্য ও মন্তব্য রাখে। এখন প্রশিক্ষণপ্রাপ্ত শিক্ষক-শিক্ষার্থীদের নির্মিত চার্ট ইত্যাদি সম্পর্কে কিছু বলা হচ্ছে যার বিবরণের মাধ্যমে এই প্রশিক্ষণের উজ্জ্বল দিকগুলির কিছুটা পরিমাপ করা সম্ভব হতে পারে। ‘সপ্তম শ্রেণীর জন্য’— ‘সরস্বতীস্তুত্রম্’ / ‘অস্মাকং দেশঃ’ / পুরীভ্রমণম্ দেশমাতৃকাবন্দনম্ / বর্ষাকালঃ / কুসংসর্গফলম্ — ইত্যাদি প্রদীপনপত্র চিত্রসহযোগে তৈরী করে অনুশিক্ষণ পদ্ধতিতে শিক্ষিকারা পড়িয়েছিল। অপর দুজন প্রশিক্ষণার্থী ‘কলহপ্রিয়াখ্যানম্’ ও ‘রামবনবাসকথা’ বিষয়কে অবলম্বন করে পড়িয়েছিল। প্রশিক্ষণার্থীরা বিবিধ শিক্ষণানুযঙ্গ তৈরী করেছিলেন বর্ণমালা, সংখ্যা, পুরুষ, সাতটি কারক ও বিভক্তি সম্পর্কে সবিশেষ জ্ঞানার্জনের জন্য কি করে এগুলি সম্পর্কে সুনির্দিষ্ট সুস্পষ্ট ধারণা পাওয়া যায় তারও আলোচনা হয়েছে।

ছাত্রছাত্রীরা ইতিপূর্বে যা জেনে ফেলেছে তা যথাযথ অন্বেষণ করে দেখে শ্রেণীতে বডি ল্যাংগুয়েজের মাধ্যমে, বিভিন্ন ভিসুয়াল উপকরণের সাহায্যে শ্রুতিদর্শন নির্ভর কাজের মাধ্যমে শ্রেণীকক্ষকে নিজের মত মনে করে শিক্ষা দিতে হবে। ভাষাশিক্ষার সময় ম্যাগাজিনের ছবি ব্যবহার করে, নানা রকম সংযোগমূলক খেলার প্রবর্তন করে, বিভিন্ন আনীত ফুলের নাম করে যুগ্ম ও সমষ্টিগত কাজের প্রবর্তনের মাধ্যমে জ্ঞান, বোধ, প্রয়োগ ও দক্ষতামূলক কাজের মাধ্যমে কাউন্সেলিং-এর মাধ্যমে সংস্কৃতশিক্ষাকে কিভাবে আরও আধুনিক করে তোলা যায় —তার প্রতি দৃষ্টি আকর্ষণ করা হয়েছিল Resource Person-দের পক্ষ থেকে।

শিক্ষার্থীরা সংখ্যা বাচক শব্দসম্পর্কে চার্ট বানিয়েছিল। বিভিন্ন সর্বনাম শব্দের পৃথক ও সার্থক ব্যবহারের জন্য উদ্যোগী হয়েছিল সংখ্যাবাচী শব্দপ্রয়োগ করে ১ লিখে হাতে একে ঈশ্বরঃ একঃ। এইভাবে ২ থেকে ১০ পর্য্যন্ত সংস্কৃত লিখে — দ্বৌ করৌঃ / ত্রয়ঃ শ্লোকাঃ / চত্বারঃ বেদাঃ / হস্তে পঞ্চ অঙ্গুল্যঃ / ভারতবর্ষে ষট্ ঋতবঃ / সপ্তাহে সপ্ত দিবসাঃ / চত্বারি চত্বারি চ অষ্ট ভবন্তি / গ্রহাঃ নব ও দিশঃ দশ ভবন্তি ইত্যাদি সাধারণ দশটি বাক্য লেখার সঙ্গে যে সংখ্যাবাচী শব্দ শেখা হয়ে যায় তার জ্ঞান পেয়েছিল।

“জ্ঞানমেব বলম্” —এই সত্য উপলব্ধি করে এবং Sanskrit is the foundation of All Indian languages এই তত্ত্ব অনুধাবন করে সংস্কৃতশিক্ষার প্রতি প্রীতি জন্মানোর জন্য প্রত্যেকেই সংকল্প নিয়েছিল।

শিক্ষাপ্রদ শ্লোকগুলি সংগীতের মাধ্যমে গীত হলে শিক্ষার্থীরা সহজেই শিখতে চাইবে এই মর্মে তাদের শোনানো হয়েছিল, গান গেয়ে ‘আগুনের পরশমণি হোঁয়াও প্রাণে’— গানটি। এছাড়াও কতকগুলি শিক্ষাপ্রদ শ্লোক যেমন ‘বিদেশেষু ধনং বিদ্যা ব্যাসনেষু ধনং গতিঃ। পরলোকে ধনং ধর্মঃ, শীলং সর্বত্র বৈ ধনম্’— ইত্যাদি শ্লোকগুলি লিখে wall-এ টাঙানো যায়। নীতিবিষয়ক কাহিনীগুলি চার্টের মাধ্যমে সুচিত্র সহ উপস্থাপিত করে পড়ানো যায়, মহাপুরুষের জীবনের কিছু অংশ স্কেচ করে দেখানো কিংবা স্বাধীনতা সংগ্রামীদের চিত্র দেখিয়ে দেশপ্রেমের ভাবোদয়

ঘটানো ইত্যাদি সহজ বিষয়গুলিকে উপজীব্য করে শিক্ষণীয় বিষয়ের কথা ভাবা যেতে পারে। — এসব বিষয় আলোচিত হয়েছিল।

অনুভবসিদ্ধ ব্যাপারকে স্বল্পাকারে ব্যক্ত করা অসম্ভব। তবু পরিশেষে বলা যায় যে নতুন পদ্ধতিতে সংস্কৃত শিখাতে নিলে যে সংস্কৃতের ব্যাকরণের কাঠিন্যের কথা ভেবে গোড়াতেই সংস্কৃত শিক্ষা থেকে পিছিয়ে পড়ার বিকৃত মনোভাব তা থেকে নিষ্কৃতি পাওয়া যায়। আমরা জানি সংস্কৃত এখন তৃতীয় ভাষারূপে বিদ্যালয় পাঠক্রমে পশ্চিমবঙ্গে স্বীকৃত ও আবশ্যিক বিষয়রূপে কেবলমাত্র সপ্তম অষ্টমশ্রেণীতেই পড়ানো হয় — কিন্তু এইভাবে পড়ালে যদি সংস্কৃত শিক্ষানুরাগ বৃদ্ধিপ্রাপ্ত হয় ক্ষতি কি? ‘নাইমামা থেকে কানামামা ভালো’ — অর্থাৎ প্রচলিত অবহেলা থেকে নবশিখনপদ্ধতিতে অনেক সুফল পাওয়া যায়। শিখনপ্রচেষ্টার সার্থকতা অবশ্যই প্রতিভাত হবে বলে আশা করা যায়। তবে হ্যাঁ — কতটা ফলপ্রসূ হবে তার দায়ভাগ প্রশিক্ষণপ্রাপ্ত শিক্ষক-শিক্ষিকাই বলবে।

“জয়তু সংস্কৃতম্”

ভারতে ভাতু ভারতী

CTE ORIENTATION PROGRAMME

Subject : Sanskrit

Dated : 24th & 25th May '06

Sl. No.	Name of Participants	Name of School
1.	Smt. Nibedita (Roy) Dassarma	Alipore Multipurpose Govt. Girls' School
2.	Smt. Sampa Basu	Gramya Hitakari Girls' School (H.S.) Andul, Mouri
3.	Smt. Sanchita Nandy	Gramya Hitakari Girls' School (H.S.) Andul, Mouri
4.	Shri Dinesh Ch. Bhattacharya	Baranagar Ramkrishna M. High School
5.	Shri Batuknath Bhattacharya	Baranagar Ramkrishna M. High School
6.	Smt. Shipra Mishra	Sodepur Chandrachur Vidyapith for Girls'
7.	Smt. Sagarika Halder	Garfa D. N. M. High School
8.	Smt. Swati Das	Uttar Kusum High School

ENGLISH

**WORKSHOP ON 'USING THE ENGLISH TEXTBOOK
TO DEVELOP SPECIFIC LANGUAGE SKILLS'**

DATE	26.05.2006 and 27.05.2006
VENUE :	Institute of Education for Women, Hastings House
OBJECTIVES :	To enable teachers to uncover tacit beliefs about language learning and teaching, to critically evaluate their uncovered beliefs, with a view to changing them and subsequently their classroom practice. To enable teachers to use the language textbook to develop specific language skills to improve communicative competence of ESL learners, in large classes.

PROGRAMME SCHEDULE

Day 1 :

- 10:30 AM – Registration
- 11:00 AM – Inaugural Programme :
Welcome Address by Prof. Nina Nandy
Address by Chief Guest, Prof. U. K. Basu, President, WBBSE
Address by Special Guest, Dr. R. N. De, Director, SCERT.
- 12 Noon – Objectives of the Workshop- Prof. Aparna Chakraborty
- 12:20-12:30 – Tea Break
- 12:30 PM – Lectures by Resource Persons :
Developing Reading Skills-Teaching strategies
By Prof. Madhuri Dasgupta
Special Officer of English, WBBSE
Developing Writing Skills-Teaching Strategies
By Prof. Sanghita Sen, Director,
Institute of English, Kolkata
Teaching Oral Conversation at Lower Language Levels.
By Prof. Saktipada Patra, Officer-in-Charge
Govt. Training College, Malda.
- 2:00 PM – Lunch Break

2:30 PM - Group Activity – Preparation of Draft Lesson Plans

4:00 PM - Tea Break

Day 2 :

11:00 AM - Group Activity continued.

12:30 PM - Tea Break

12:45 PM - Presentation of Group Reports

2:00 PM - Lunch Break

2:30 PM - Valedictory Session

4:00 PM - Tea Break

4:15 PM - Coordinator's Address

5:00 PM - Vote of Thanks.

Report of the Co-ordinator

By

PROF. APARNA CHAKRABORTY

A workshop cum orientation programme for the in-service secondary teachers of English was held at Institute of Education for Women, Hastings House, on 26th May and 27th May, 2006. The theme of the workshop was 'Using the English Language Textbook to develop specific Language skills'.

The purpose of CTE programmes is to encourage experimentation and innovation in secondary education through subject oriented theme-specific courses.

When do we feel the need to experiment? We experiment when we question our existing beliefs, or when we have a problem and are dissatisfied with the solutions that are available to us.

As teachers of ESL, what is our goal? Primarily we need to develop in our students their basic practical communicative abilities. They should be able to comprehend English when they listen to it or read it, be able to speak and write it, i.e. develop the 4 macro-skills of Listening Speaking Reading Writing.

Since, English is not a content subject like History or Chemistry, its teaching involves more than being told about the rules that govern the language. Primarily it is a skill subject, where the skills have to be actively practised by the learner, if they are to be mastered and effectively used.

To achieve this in the ESL classroom, a language-teacher concentrates on systematic training of specific skills, even sub-skills. When the focus is on classroom implementation a teacher always has definite aims. For e.g. a text/lesson may be selected to develop writing skills or 2/3 sub-skills of reading such as inferential skills, locating details from the text, or even global comprehension skills.

To develop these skills and make our learners proficient in English, a user needs opportunity to practice, both inside and outside the classroom, i.e. ample opportunity must be provided to our learners to practice English especially in the classroom, because he will get very little opportunity to practice outside it.

On the other hand, we have modern approaches to Language teaching, especially the Functional Communicative Approach, focusing more on learner-centricity, talking about individual learner abilities, learning styles, which learners bring to the whole learning process. Communicative Language Teaching recognizes that all individuals are vastly different from each other, focuses primarily on teaching the meaning, functionality and

use of language in a learner centred manner using “real life” tasks, situations and roles in order to develop learners’ communicative proficiency in English.

In the Indian ESL situation, this means that ESL teachers have to do this job in classrooms which have more than 50 students — motivated or unmotivated, high achievers and low achievers, advantaged & disadvantaged, with all kinds of different purposes for learning English. The classrooms are cramped, full – students even sit on window sills.

Teachers cannot establish rapport with individual students, they do not even know all the names at the end of the year, or get to make eye contact with even half the students. These are of course, all affective factors related to the classroom but they are very important in the ESL situation. Besides these, a teacher also feels that the effort required to teach large classes a “difficult” subject like English is immense. Added to all this, there is a tremendous discipline problem, in many schools.

Certainly, teaching English communicatively in such a situation is difficult. The teacher cannot move around a lot and has to face the students constantly. Many exciting things that can be done in an ESL classroom – role play, group discussion, etc. are abandoned simply because of the immense task of setting it up in a large class.

The purpose of the workshop was to help practising teachers teaching ESL (English as a Second Language) in Bengali medium schools to use the Learning English textbook to develop the language skills of their students and thereby improve their communicative competence. It was felt that as most teachers taught in very large classes, it was difficult to develop these skills in their students as opportunities for individual practice were limited. The objective was to help such teachers critically evaluate their own beliefs and make informed choices in their classroom practice.

The workshop was inaugurated by the chief guest, Prof. Ujjwal Kumar Basu, President, WBBSE. In his inaugural address, Prof. Basu traced the development of English Language teaching in our country. He discussed the changes introduced in the Learning English series and the reasons why the textbooks were modified. He also stressed that separate handbooks for teachers of English would not be published.

Next, Dr. Rathindranath De, Director, SCERT and Special guest at the workshop discussed the 86th Constitutional Amendment Act, 2002 and its impact on increasing responsibility of the state and thereby, teachers. He also discussed the impact of globalisation, increasing commercialisation and privatisation. He felt that all these factors would contribute towards developing a sense of accountability in our teachers. In this context, he discussed the National Curriculum framework 2005 and its statements on second language teaching-learning. The NCF has stressed the importance of the

Constructivist Approach to learning in which "Learners actively construct their own knowledge by connecting new ideas to existing ideas..." (NCF 2005). The NCF has emphasized the importance of increasing teacher proficiency in English and pupil's exposure to English outside school. The two fold goals of L₂ curriculum as stated in NCF- argues for an across the curriculum approach that breaks down the barriers between English and other subjects.

The first lecture of the plenary session was delivered by Prof. Madhuri Dasgupta Special Officer of English, WBBSE. – on 'Developing Reading Skills – Teaching strategies' Stressing the importance of Reading Skill, she discussed why Reading should be taught in the classroom, the reading problems that most L₂ students have and how they can be corrected. She also provided the participants with a list of different techniques for developing reading skills, including task-based learning, which is especially useful in large classes. Prof. Dasgupta also explained the different phases of a reading lesson – the aims, teaching preparation required and activities that can be given at each stage.

Prof. Saktipada Patra, Officer-in-charge, Malda Govt. Training College delivering his lecture on "Developing Aural Oral Skills – Teaching strategies", began with the application of the 3 Ps – possibility, practicability and particularity- in the classroom situation. He advised teachers to provide students with ample opportunity for listening to English, especially focused listening. He felt that more opportunities should be provided for 'noticing' language to enable students to pick up structure and vocabulary. Pre-recorded listening tapes should be used in the classroom to enable students to listen to a large variety of voices instead of only teacher talk. Prof. Patra traced the different stages of an Aural-oral lesson. The main emphasis, should be on Hot Education (Burnes) – Pupil centred learning, varied interaction, problem solving approaches, creation and simulation of events. He concluded by suggesting that teachers should instil confidence in learners, maximise learning opportunities, act as facilitator to foster language awareness.

The last lecture of the session was delivered by Prof. Sanghita Sen, Director, Institute of English, Kolkata. She emphasized that writing is essentially a communicative act and we write to communicate some message to our readers. We write to express ourselves in a cohesive manner. She distinguished between the two productive skills of speaking and writing. In speech, fluency is more important than accuracy whereas, in writing, we may prepare a rough draft, reframe it and finally prepare an 'accurate' piece of writing. If we accept that writing is a process, then we must implement it in our classrooms as a process. Certain techniques, such as brainstorming to elicit information, group work were suggested for large classes. Proofreading, i.e. correcting spelling, punctuation, sentence structures, etc. by students themselves was considered important.

After the lecture session, the participants were divided into three groups – Reading, writing and Aural-Oral. Each group was asked to prepare a draft lesson plan on a lesson from Learning English text (CI 8 – CI 10) to develop particular macro skills including the teaching strategies suggested by the resource persons for large classes.

Through the activities of this workshop, we hope we will be able to encourage our English teachers to adopt a more eclectic vision of teaching English – to draw on a broader range of techniques to suit our peculiar needs, to create greater opportunities and motivation for learners to engage in communication in English. Thus, there is a need to constantly look for strategies that respect both 'old' and 'new' approaches with regard to classroom realities.

Summary of Inaugural Address

PROF UJJWAL KUMAR BASU

President

West Bengal Board of Secondary Education

Curriculum transaction has become largely proactive. The West Bengal Board of Secondary Education adopted functional communicative approach as a potential tool for communicative syllabus design. English study prior to 1984 was content-specific. But it became skill-specific as English was withdrawn from primary cycle. Four basic practical skills were considered to be the very essence of English study at the secondary stage. The basic practical skills are obviously listening, speaking, reading and writing. The endeavour to master English was linked up with two receptive skills and two productive skills. Listening and reading are related to development of receptive skills of communication and speaking and writing are central to the acquisition of mastery of productive skills of communication. In our situation speaking has become somewhat a problem. Our learners feel easy with writing English. But spoken English poses a challenge to them.

Proactive textbooks offer to the stake-holders an opportunity for developing the three skills. The foremost, i.e., the listening skill, depends upon the speech product of our teachers. Care has been taken in the primary course books for development of full-mouthed, distinct pronunciation. A variety of phonic drills has been incorporated in the primary English textbooks giving ample opportunities for the teachers and the taught to acquire efficiency in fullmouthed distinct pronunciation. The teacher is required to be an expert in this line. An oral-aural skill of the learners cannot mature unless such skills are perfectly at the command of the teachers.

The West Bengal Board of Secondary Education has introduced a new section in the Learning English schedule, viz., communicative skill. The practice tasks contained in this section are to be carefully handled in the classroom giving adequate scope for the learners to shake off the initial shyness and come up with the desired fluency.

In the primary cycle the course books have been designed in the line of D A Wilkin's semantico-grammatical method. Michael West in his service list of English vocabulary charted out a definite pathway for us to follow. Acquiring vocabulary has also been a major focus in Tagore's concept of English study as reflected in the course books designed by him under the title 'Ingreji Sopan', 'Ingreji Sahaj Siksha'. All these pioneering examples have offered guidance for us to design the existing course books in the primary cycle in our State.

Once the basic mastery is gained by our students in respect of English vocabulary and structures in the primary cycle, the secondary course of English study seeks to develop in the learners an awareness about the use of appropriate vocabulary and appropriate structure for various language functions. Learners must be conscious about the purpose or the situation prompting the use of language. This is fundamental to

communicative English. Mudaliar Commission arranged for thoughtful sessions of deliberations by English teachers all over the country to ascertain the status of English study in a multi-lingual setting our country has. Structural approach gained ground in the design of English textbooks since effective drills of various structures of English language were considered to be a basic condition for acquisition of mastering in English. It was Kothari who drew our attention to the specific purpose for which English is necessary in our country. For academic purpose it is mainly for the use of library resources that English has an important status. Inter-state discourses necessitated by official compulsions also call for intervention of English. Hence the purposes for studies of English paved the way for intervention of functional communicative approach in school English.

Following the doctrine of 'inter-language' propounded by Pit Corder et al, the interference of the mother tongue in learning the second language came to our attention. Direct Method discouraged mother tongue interference. But later on with the development of Contrastive Linguistics comparative paradigms of structures of L1 and L2 were found to be helpful for rapid acquisition of L2 bilingualism, i.e., learning L2 with the help of L1 was championed by the celebrated linguist H H Sterne in his report on "Teaching of Second Language in Primary Education" as the Chairman of the UNESCO Committee. Tagore experimented with bi-lingual approach way back in the thirties of the last century. The main thing about the concern of our teachers to train up our learners in English is how to make our students learn the second language like English. Methodologies and approaches may be a legion. But it is the teacher who will decide on the mix of methodologies and approaches in consideration of the demand of the particular classroom.

Translation has long been discarded as a tool for acquisition of a second language. But of late in backward classroom situation translation has been found to be an interesting as well as an easy approach. Corresponding structured sentences in L1 conforming to the types of language functions of English study may be tried out with our students to see whether they feel comfortable in acquiring L2 structures flawlessly.

Tagore once remarked that it is the teacher who imparts education. Techniques and methodologies or approaches may provide our teachers some additional advantages. It is the sympathy of a teacher that counts much in student-preparation. How a student can reach perfection should be the prime enquiry and effort of a teacher. The new generation of teachers should concentrate on effective teaching and fruitful learning.

Commendable researches were done in the Soviet Union on pedagogy. A new discipline in the name of Pedagogic Psychology came up. The central idea of this new discipline was that teaching is essential for upbringing. The new discipline spelt out serious warning against the mental disease called didactogeny from which students suffer as a result of extreme apathy and cruelty on the part of a teacher. Tolerance and sympathy are the hallmark of any worthy teacher. We, teachers, should never forget.

Teaching–Learning of English as Second Language : Teacher Education through Radio

DR. RATHINDRANATH DE

Director
SCERT (WB)

A scheme of Teacher Education sponsored by the Government of India is being implemented in the States since 1987-88. During the Seventh, Eighth and Ninth Five year Plans 100% central assistance on establishment of DIETs and on up-gradation of selected Secondary Teacher Education Institutions into CTEs and IASEs was available.

In order to reflect the requirement of Teacher Education for improvement of School Education in the State, elaborate process of consultation among the teacher educators, eminent educationists, teachers, educational administrators, representatives of the Boards/Councils was initiated to spell out the issues and concerns of Teacher Education and it was realized by all concerned that there were certain challenges in the task, which involved identification of relevant issues, design of suitable implementation strategies, establishment of link among various organizations etc., so that the TEACHER in the school is well prepared and committed to the cause of spreading quality education for all in West Bengal

Although the centrally assisted scheme of teacher education proposes to support the strengthening of the SCERT, DIET, IASE and CTE, it was felt necessary to highlight the real needs of the Boards/Councils in the proposed Perspective Plan of Teacher Education in West Bengal.

Summary of Emerging Issues in Teacher Education:

Various issues emerged out of the process of Consultation that took place during the planning of Perspective Plan and could be classified as related to:

A. Administrative:-

- (1) Co-ordination among different organisations in School Education, Teacher Education and Higher Education.
- (2) Gap in the number of sanctioned posts and the actual number of teachers at different levels of school education/teacher education. Filling up of vacancies.
- (3) Role of DIET and its relation with SCERT/WBBPE/IASE/PTTI in the State.
- (4) Sharing pattern of State & Central Government funds — proportion and duration.
- (5) Mode of allocation of funds to different agencies.

- (6) Number of untrained teachers.
- (7) Increase in the weightage for Pre-service training during selection of Secondary school teachers by SSC (School Service Commission).
- (8) The cost of training of Deputed teachers (Salary etc.) as a component of training cost.
- (9) On the job training for untrained employed teachers – different modes.
- (10) Development of infrastructure of teacher education institutions – uniqueness of the PTTIs in West Bengal – link of DIET and PTTI – resource support to the PTTI from the DIET.
- (11) Assessment of need and provision of facilities according to requirements.
- (12) Identification of agencies responsible for in-service training.
- (13) Sensitisation of key functionaries at DRC and CRC.
- (14) Projection of the number of institutions over the years.
- (15) Inclusion of Inspectors of Schools in training Programme.

B. Academic:-

- (1) Duration and entry qualification in Pre-service Teacher Education Programme in the (a) PTTI (b) DIET (c) Secondary Teacher Education Institutions.
- (2) Whether pre-service training should be made compulsory for Secondary School teachers, proportion of Theory and Practice in Pre-service programme.
- (3) Introduction of crash course/online course/ on the job training using ICT for the large number of untrained teachers already in service.
- (4) Orientation of teachers in different subjects for improvement of quality in classroom transaction.
- (5) Identification of training needs of practising teachers.
- (6) Refresher courses of longer duration.
- (7) Training of teacher educators.
- (8) Educational Research – its strengthening and dissemination including evaluation, monitoring and impact analysis at SCERT.
- (9) Establishment of better co-ordination in the field of teacher education through appropriate linkage with Higher Education and School Education.
- (10) Renewal of curricula by the Boards/Councils of School Education and subsequent changes in Pre- and In-service Teacher Education Programme.
- (11) Integrated Science/Social Science – training requirement.
- (12) Emerging Social issues in teacher education programme.

- (13) ICT in Education, Environmental Education, Vocational Education, Value Education in Teacher Education Curricula.
- (14) Importance of co-scholastic areas, human rights, gender equity in teacher education.
- (15) Utilisation of distance education in revitalising Teacher Education, Computer aided content-based learning, self-learning; evaluation process – system of grading.

It is heartening to note that the CTE at the Institute of Education for Women, Hastings House has initiated in-service teacher education programme for secondary school teacher according to the directives of the Perspective Plan of Teacher Education, which have been approved by the Govt. of West Bengal and by MHRD, Govt. of India.

In this context efforts initiated at SCERT in terms of the issues of teaching learning of English as Second language may be considered relevant for the participants. The following paragraphs will describe the recent activities of SCERT (WB) in this direction.

Since its inception the Educational Technology Division of SCERT (WB) has attempted various approaches in seeking solutions of challenges in mass education in West Bengal. In continuation of the same tradition in SCERT (WB), particular attention was directed towards identifying techniques so that a low - cost media technology like the RADIO might be utilized in achieving the goals of Sarva Siksha Abhiyan (SSA) in the state. Several workshops were organized by SCERT in 2003 as SSA activity in which eminent educationists, teacher-educators, teachers, All India Radio personnel participated. On the basis of the deliberations and recommendations from these workshops a theoretical framework for Educational Radio Broadcasting was obtained and SCERT (WB) published a Book "SHIKSHA PRASARE BETAR" containing the entire outcome in 2004.

In 2005 SCERT (WB) initiated a study designed to use the Radio for teaching-learning of English as second language at the primary and upper primary levels in the state of West Bengal. The purpose of the study was to develop radio lessons for teaching learning of English as second language through the functional communicative approach and to popularize the teaching of English as second language through the same approach. The radio lessons were primarily designed for the practicing teachers at the primary and upper primary levels in the state.

Taking this cue, SCERT (WB) designed the project "Use of Radio in Teaching-Learning of English as Second Language at the Primary and the Upper Primary levels in the state of West Bengal" for teacher's orientation under **SSA-DPEP programme** for the year **2005-06**.

The **objectives** of the project were –

- (I) To develop radio lessons for the teachers in English Language learning and acquisition through the functional communicative approach.
- (II) To popularize the English Language teaching through functional communicative approach.

The objectives tried to answer the urgent call of **National Curriculum Framework 2005** that “Much of research time has gone into the teaching of English for the middle classes, in English medium schools, rather than the teaching of English as a second language in regional language medium schools”.

We divide the objectives into seven broad categories for development of communication to motivate teachers, to inform the guardians, to teach the students and to change behaviour of the community as a whole towards English Language teaching. Thus we tried to bring the pedagogical issues to the doorstep of the community. We also tried to lower the educational cost. It is increasingly evident that updating teachers with current pedagogical issues through refresher courses / orientation workshops creates complication with exchequer as well as with school routine. Moreover all teachers cannot reap benefit from these programmes. Isolation is one of the major concerns to educational administrators as well as the physically isolated teachers.

The Workshop identified **21** topics for Radio broadcast. They are arrayed below:

1. Status of Teaching ESL at the School level: An historical Overview.
2. Expected Skills & Competencies of listening and speaking English as a second language
3. Expected Skills & Competencies of reading and writing English as a second language
4. Functional communicative Approach in teaching ESL
5. Competency based text book analysis (class wise)
6. Use of Mother Tongue in teaching second language English
7. Teaching Grammar through Rhymes and Poems
8. Teaching methodology for writing skills
9. Teaching methodology for reading skills (prose & poetry)
10. Teaching vocabulary at the Primary level.
11. Teaching vocabulary at Upper Primary level.
12. A model role-playing
13. How to handle student's errors and mistakes

14. Use of language games in teaching English Second Language
15. Use of stories in teaching English Second Language
16. Preparation and practice of conversation lessons
17. Teaching English pronunciation at school level
18. Competency based evaluation
19. Remedial teaching after evaluation
20. Class management – small and whole group teaching, peer learning, self-learning.
21. Preparation and preservation of teaching-learning materials in schools.

With such a variety of issues to address, scripting of the radio lessons was a challenge to us. So we tried to balance information and communication. We intentionally avoided jargons, technical terms and included bit of demonstration and fell back upon the expected teaching methodology for a communicative and participatory teaching-learning situation.

We scripted our programmes for 15 minutes slot because in less than 15 minutes duration, brevity may only be gained at the cost of clarity and intelligibility and duration of more than 15 minutes would strain the attention of the audience. But fillers were still indispensable and we toyed with several ideas.

We looked into the prescribed textbooks of English by Primary and Secondary Boards. Poems, rhymes & short stories were included in the syllabus for the purpose of pleasure reading.

The programme was on air on **Mondays, Wednesdays, Fridays** from **6th February 2006 to 24th March 2006** from **9-30 to 9-45 p.m.** This programme is a **sponsored programme of SCERT (WB)**. SCERT (WB) purchased 21 slots from AIR, Kolkata for Kolkata 'A' and Siliguri stations.

The deliberations have culminated in the publication "REACHING THE COMMUNITY THROUGH RADIO: TEACHING – LEARNING OF ENGLISH AS SECOND LANGUAGE" which is also available in our portal, www.scertwestbengal.org, in PDF format, and contains the following chapters: -

1. THE ACTIVITY REPORT
2. COMMITTEES AND COMMISSIONS ON TEACHING OF ENGLISH AS SECOND LANGUAGE
3. THE RADIO SCRIPTS
4. THE FEEDBACK

5. ANNEXURES

- I. Promotional campaigns
- II. Schedule of the broadcast
- III. Reckoner of participants

To cite a portion of the chapter "COMMITTEES AND COMMISSIONS ON TEACHING OF ENGLISH AS SECOND LANGUAGE", the following are presented here:

Name of the committee/ Commission	Chairman & Member Secretary	Tenure	Observations
<p>1. Committee on Secondary Education in India (Tara Chand Committee)</p> <p>Source: Ref. 4</p>	Prof. Tara Chand	1948	<p>1. The teaching of the Federal Language should be started at the end of the Junior Basic Stage and should be compulsory through out the Pre-Secondary Stage, but may be optional thereafter.</p> <p>2. English may be an optional subject at the Senior Basic stage and should be compulsory throughout the Pre-secondary and Secondary stages, so long as it remains the medium of instruction in the Universities.</p> <p>3. The report locates Senior Basic between classes VI & VII.</p>
<p>2. Committee on Course of studies and Syllabi at the Primary stage (Prathamik Shikshar Shikshakrom O Pathyasuchi) WB</p>	Prof. Himanshu Bimal Majumdar	1974-1979	<p>1. The Committee thinks that in Govt. and Govt. aided Secondary Schools; the knowledge of English is not compulsory at the time of admission to class-VI.</p> <p>2. For this reason the secondary school curriculum should be modified.</p>
<p>3. The Education Commission, Govt. of WB</p>	Dr. Ashok Mitra Shri S. N. Ghosh	1991-1992	<p>1. The teaching of English in Govt. and Govt.-aided institutions may commence from Class- V.</p> <p>2. This will not, in the Commissions view, come in conflict with the syllabi for classes I- V introduced in the state on the recommendations of the Committee on Course of Studies and Syllabi at the Primary Stage, (1974-79).</p>

Name of the committee/ Commission	Chairman & Member Secretary	Tenure	Observations
4. The One-Man Committee on English in Primary Education, West Bengal	Dr. Pabitra Sarkar	1998	<ol style="list-style-type: none"> 1. Teaching of English, with the aid of an appropriately devised text, be started in class III. 2. Informal arrangement for teaching the preliminaries after the second semester in class II are to be made. Children should not be asked to write in this class. 3. The sentiments and aspirations of parents belonging to the middle class and even those aspiring to be elevated to that category, overrode all pedagogical arguments in support of later introduction of English.
5. The School Education Committee, West Bengal	Prof. Ranju Gopal Mukhopadhyaya Dr. Rathindranath De	2001-2003	<ol style="list-style-type: none"> 1. Only one language, the mother tongue/ regional language, should be taught upto class IV. 2. Preparation should be made for result-oriented teaching of English as the compulsory second language from class V. Decision in this respect should await the result of the survey suggested by Prof. Pabitra Sarkar Committee.
6. National Curriculum Framework	Prof. Yash Pal Prof. M. A. Khader	2005	<ol style="list-style-type: none"> 1. Mother tongue(s) of children should be the medium of instruction in schools. 2. If regional language is not the learner's mother tongue, the first two years of education must still be covered through the mother tongue. 3. At the primary level, children will study the state or regional language as a compulsory subject. 4. In the middle school, children continue studying the state language(s) and also study English.

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 3. "Report of the Education Commission (1964-66) : Education and National Development"
 4. "Report of The One-Man Committee on English in Primary Education, West Bengal" — Government of West Bengal, Basumati Corporation Limited, 21 September 1998.
 5. "Report of the Education Commission: Government of West Bengal" — Government of West Bengal, Sree Saraswaty Press (1984) Limited, August 1992.
 6. "Report of The School Education Committee, West Bengal" — The Member-Secretary, School Education Committee, West Bengal, 31st December 2002.
 7. "National Curriculum Framework for School Education (NCFSE)" — NCERT, 2000.
 8. "National Curriculum Framework for School Education (NCFSE)" — NCERT, 2005.
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Developing Reading skills in the classroom

PROF. MADHURI DASGUPTA

Special Officer in English

West Bengal Board of Secondary Education

Whatever the approach in language we do realize that the skill students need most in a language learning programme is **READING**. So, the reading skill should be well developed and it is this skill which is maintained even after school; by the students themselves without further help from the teacher. A teacher must therefore set out to prepare the students to develop habits of reading which will lead them on to direct comprehension of any text that comes into their hands, not only for the purpose of learning or collecting information, but also for pleasure and enjoyment. This paper will focus on how a teacher can develop the skill of reading in the classroom. The first question then is, "what is reading?"

Reading is a visual aspect of learning and contains the following steps :

- (i) recognition – of forms of the letters of the alphabet, word forms etc.
- (ii) assimilation – i.e. words received by the eyes and then transmitted to the brain. There these are converted into messages and thought.
- (iii) intra-interpretation – i.e. linking all parts of the information stated in the text.
- (iv) extra-interpretation – this includes analysis, criticism, appreciation, selection and rejection of information.
- (v) retention
- (vi) recall
- (vii) communication – i.e. the use to which the impression is immediately or eventually put. This includes the very important subdivision : thinking.

There is always a purpose behind every reading activity. Even if reading is done for pleasure, it is still purposeful. If we wish to teach reading as a skill, then students should be exposed to a variety of texts, as a scientific report is not written in the same way as a personal letter, or instructions on a medicine bottle.

Traditionally, texts were prepared to introduce certain structures or vocabulary. Such texts were contrived (inauthentic). No real interaction could take place between the reader and the writer. Through these artificial texts, no real message could be communicated. If we wish to improve the teaching of reading skills, then we must look into the process of reading.

Today we know that we can develop reading skills by encouraging a close interaction between the reader and the text. An efficient reader can interact with different types of

texts and uses different strategies depending on the kind of text and purpose of reading. We therefore have to match reading skill to reading purpose.

Skilled readers can scan to locate specific information in a text and skim to extract general information from it. An efficient reader also interrogates materials of all types by looking for clues in titles or sub-titles and within the passage itself. So, pre-reading questions can be useful because they focus learner's attention on the type of information they are about to read.

Efficient readers are able to relate texts to their background knowledge or previous knowledge of a similar text.

Reading involves a variety of skills. The main ones are given below :

- (i) Recognizing the script of a language.
- (ii) Deducing the meaning and use of unfamiliar words
- (iii) Using knowledge of the language system.
- (iv) Using background knowledge.
- (v) Distinguishing main idea from subordinate ideas.
- (vi) Recognizing connectors and idea linkers.
- (vii) Using predictive skills
- (viii) Inferring and connecting
- (ix) Evaluating and judging
- (x) Extracting specific information
- (xi) Skimming
- (xii) Scanning

In order to develop these skills, several types, of exercises can be used. The 'Learning English' series of textbooks published by the Board of Secondary Education provides a variety of such exercise types : Here is a list of task types :

Having non-linguistic responses :

- (i) doing something (following instructions)
- (ii) arranging in order (sequencing) by using symbols
- (iii) completing a map / drawing
- (iv) putting a tick
- (v) making a graph
- (vi) underlining/circling/putting in a box
- (vii) labelling a diagram.

(viii) tracing a route on a map

(ix) matching

Having linguistic responses :

(i) filling in columns (using short responses)

(ii) labelling tree diagrams/flow-charts

(iii) filling in gaps (with words/sentence lengths), cloze type

(iv) making free notes

(v) labelling paragraphs/functions of sentences

(vi) labelling attitudes and expressions

(vii) inserting heading/logical connectors

(viii) inserting missing information

(ix) answering short questions : wh/- type

lu/c type

T/F type etc.

Strategies that a teacher can adopt while teaching reading in the classroom. This can be divided into three phases : These are : Pre-, while- and Post-reading phases. Exploitation of text in terms of these three phases helps not only with the problem of motivation, but also with the other problems of language

1. Pre-reading phase– This phase tries to :

(i) Introduce and arouse interest in the topic

(ii) motivate learners by giving a reason for reading.

(iii) provide some language preparation for the text

Of course not all of these will be relevant for all texts. In some cases the language might already have been introduced. In order to help prepare for pre-reading work, useful questions may be asked by exploiting the learners' background knowledge.

2. While-reading phase – This phase aims to :

(i) help understanding of the writer's purpose

(ii) help understanding of the text structure

(iii) clarify text content

The comprehension exercises at the end of a text are typical while-reading activities. What the teacher needs to do is consider what the effect of the exercises are and whether these correspond to both his and his learners' aims.

3. Post reading phase : This phase aims to consolidate or reflect upon what has been read, and relate the text to the learners' own knowledge, interests, or views.

The work does not refer directly to the text, but 'grows out' of it. Post reading may also include any reactions to the text, and to the while reading work.

We can think of another phase i.e. the last phase where the reader can go beyond the text working on projects related to the information acquired from the text. This activity can help the readers to do some extensive reading. The teacher's role in the classroom should be to provide opportunities for interaction, where students are encouraged to express their own reactions to the text, as much as possible.

Teaching Writing Skills at the Secondary level

PROF. SANGHITA SEN

Director

Institute of English, Calcutta

Writing is one of the most important language skills for users of English as a Second Language. Writing could be taught through either "the product" approach or the "process" approach. In Communicative Language Teaching, the teaching of the writing skills follows the "process" approach. Writing is treated as a process; the skill is learnt through different stages and all stages are equally important to be able to write effectively.

The most important factor in writing process is that the learners should be personally involved in order to sustain their learning experience. Encouraging the learners to actively participate in each stage of the writing process make them refine and expand their writing skills. It is necessary for the teacher to know what skills he/she is trying to develop. Next, the teacher needs to decide on which means (or type of exercise) can facilitate learning of the target area. Once the teaching objective for each stage becomes clear to him/her, the teacher can then proceed to focus on what topic can be employed to ensure student participation. By s/he can pragmatically combine those objectives for better classroom teaching and can expect both enthusiastic involvement of the learner leading to effective learning.

Selecting the target area, methodology of teaching, and tasks depend largely on the following considerations

- The level of the students
- The age of the students,
- The reason for the students to learn English
- Specific objective for the writing (i.e. school tests or job application letters etc.).

Apart from these questions that help the teacher determine the target skill to be taught in the classroom a teacher should also have the following questions in mind while planning her lesson on writing skills:

- What is the end product of this exercise? (a well-written letter, a paragraph, a report etc.)
- What is the focus of the exercise? (Structure, tense usage, guided writing, creative writing).

Once the teacher is clear about these factors, s/he can begin to focus on how to involve the students in the activity to create a positive, long-term learning experience. The teacher should begin with guided writing activities and slowly, depending on the students' progress and understanding, reduce the amount of guidance and lead then to free writing activities. The idea is to build in the learners a capability to write on their own as independent and skilled writers.

Having decided on the target skill to be taught, s/he can now concentrate on the ways to teach the skill. While correcting, the teacher must choose the most appropriate manner for the specified writing area.

With both teaching objective and means of production, clear in the teachers mind, the teacher should now begin to decide on ways to involve the students by considering what type of activities are interesting to the students; Are they preparing for something specific such as a holiday or test? Will they need any of the skills pragmatically? What has been effective in the past? A good way to approach this is by class feedback, or brainstorming sessions. By choosing a topic that involves the students the teacher is providing a context within which effective learning on the target area can be undertaken.

Finally, the question of which type of correction will facilitate a useful writing exercise is of utmost importance. Here the teacher needs to once again think about the overall target area of the exercise. If there is an immediate task at hand, such as taking a test, perhaps teacher-guided correction is the most effective solution. However, if the task were more general (for example developing informal letter writing skills), maybe the best approach would be to have the students work in groups thereby learning from each other. Most importantly, by choosing the correct means of correction the teacher can encourage rather discourage students.

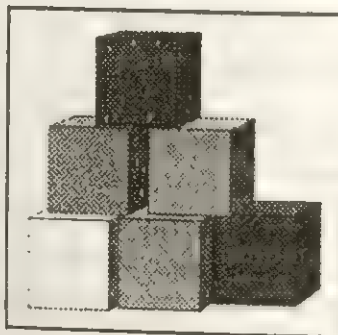
Teaching of writing skills through process approach takes into consideration a few cardinal factors. The learners are made to go through different stages to get into what can be called the "product variable", i.e. the learning output.

Teaching objectives: basic questions

- 1 . Finding the Focus: The Writing Process Identification and development of an individual style of writing in learners
2. One needs a writing process because it helps the learner
 - To organize their thoughts.
 - To prevent frustration and consequent mental block about writing
 - To use their time confidently, productively and efficient

Stages in the Writing process

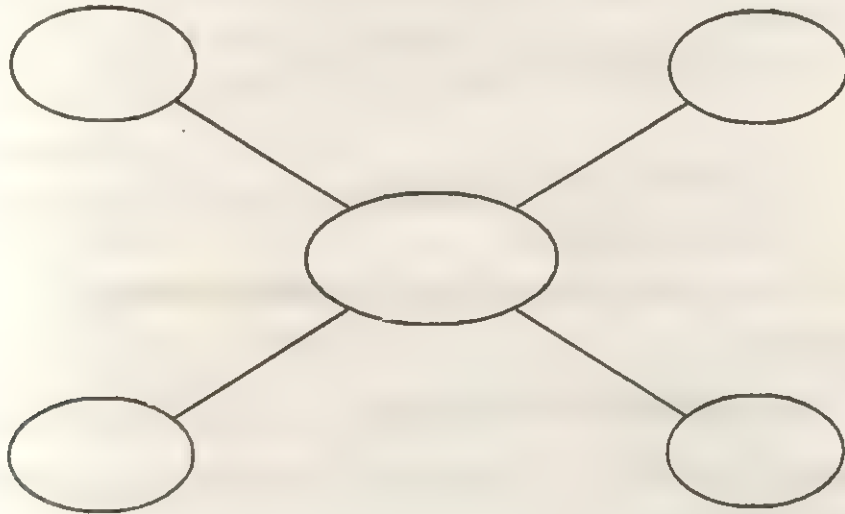
- Invention
- Collection
- Organization
- Drafting
- Revising
- Proofreading



Invention or initiation stage:

Strategies:

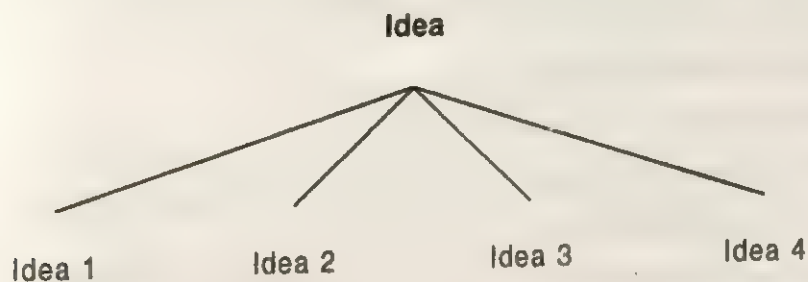
- **Revising**
- **Brainstorming:**
Jotting down ideas on paper so that the learners can give themselves the widest range of topics possible
- **Listing**
- **Clustering:** making a map or diagram of related ideas
 - In form of a Web Chart/spider gram/mind map



- In form of a flow chart for teaching writing about a process



- In form of Tree diagram etc.



Collection Stage Objective:

Once the learners decide on a topic, the next stage is to collect information for building their argument through writing. This can be done in various ways. The teacher can lead the students to the sources for collection of points or information. Sources may

be such things as textbooks, and other available authentic materials like newspapers, magazines, and the Internet.

Organization Stage:

At this stage the teacher can show them a few examples collected from earlier students' writing classes to motivate them and to set a model for those who are still undecided about their writing. The above two stages could be very well done through group activities.

OUTLINE

- I. Introduction
 - A. Build a thesis statement
- II. Body
 - A. Build points in support of argument
 - B. Develop ideas logically
 - C. Support main claim with evidence, statistics, examples
- III. Conclusion
 - A. Re-emphasize the main contention

Drafting Stage:

For ESL Classes this is a good idea to execute this stage also through group activity. The teacher must provide:

- The learner ample time to work on their piece of writing.
- Make them feel comfortable to do their writing by providing necessary teaching support and facilitating discussion among them
- Guide them to avoid distractions.
- And give them occasional short breaks.

Revision Stage: Reviewing Ideas

- Review higher-order concerns for writing
- Clear statement of ideas
- Organization of the piece of writing
- Paragraph structure
- Precise and apt introduction and a suitable conclusion

This stage is extremely important for development of writing skills as the learners tend to look at revising as a process of altering word choices and correcting spelling and syntactic errors, evaluation of higher-order concerns, the correction of later-order concerns, leaving out details that appears to them redundant, adding a few relevant

points and strengthening the introduction or conclusion. The objective of this stage is to enable the learners to look critically at their own writing.

Revising is a process of reviewing the paper on the level of ideas. It is a process of re-vision meaning literally "re-seeing" the structure of argument of the written text.

This stage is very important following the drafting stage. After the completion of a draft and handling the topic for some time the learners now have a stronger conception of their purpose, intended audience, and thesis statement. Feedback from other members of the peer group as target readers also contributes to the need to re-vision (or re-see) the writing. Rather than feeling bound to every written word, the learners should be encouraged to look at their writing as an evolving piece of work, subject to change. Sometimes a first draft is just a rough draft. But the teacher must remember that the learners must be given enough time to complete the revising process.

Proof Reading Stage:

- Review later-order concerns:
- Spelling
- Punctuation
- Sentence structure
- Documentation style/ giving bibliographic details when necessary

The teacher may offer them the following tips for proof reading:

- To slowly read their writing aloud.
- Read and reread their writing backwards.
- Exchange their writing with a friend.

The teachers must note at this stage that mere Spell check will not catch everything, and grammar checks are often wrong when done independently by the learner himself or herself. At the beginning the teacher's role is crucial at this stage - with a proper guidance the learners can be trained to do proof reading on their own at a later stage.

References:

- Hedge, Tricia (1988) Writing. Oxford: OUP
Kane, Thomas S (1988) The New Oxford Guide to Writing. NY:OUP

Internet and on-line Resources:

Purdue University Writing Lab
Grammar Hotline:(765) 494-3723
<http://owl.en-glish.purdue.edu>
<http://britishcouncil.org>
Eltecs India Digest

Developing Aural-Oral Skills

PROF. SAKTIPADA PATRA

Officer in Charge

Malda Govt. Training College

Introduction:

Language, when used for communication, is a tool, and the handling of a tool requires a certain skill. A good user of a language is able to use language effectively for his communicative needs. He possesses all the communication skills or language skills. These are : Listening, Speaking, Reading and Writing.

We can summarise the four major language skills in the following way-

Skill \ Medium	Speech	Written word
	Listening and Understanding	Reading and Understanding
Receptive		
Productive	Speaking	Written

Our curricula do not provide for the systematic teaching nor for the examination of the aural-oral skills i.e. listening and speaking. Consequent upon this and also because at least at the earlier levels especially in regional medium schools teachers do not themselves make much use of English even in teaching English, students get few opportunities to develop these skills. There is no denying the fact that students should develop proficiency in handling spoken language receptively and productively even though as a general rule no provision for formal examination exists in formal courses.

Listening

Listening is undoubtedly an important skill that needs to be developed consciously and systematically. Students need to be exposed to the English language if they want to learn it, and one of the best ways of doing this is through listening. Teachers involve students in listening for a number of reasons:

1. To have a successful conversation students must understand what is said to them.
2. The more students listen to English the better they become at listening to it.

3. The more students listen the better their speaking becomes. In particular, pronunciation improves for many students.
4. It gives students opportunities for noticing language, and, therefore, for acquiring it. It is a way of 'picking up' structures and vocabulary.
5. Pre-recorded listening allows students to hear a large variety of voices, not just their teacher's.
6. Many listening activities are good fun.

Here listening does not mean casual listening or listening with no particular purpose. Listening here is focused listening or listening for a particular purpose. The learner gets practice in listening skills. The listening activity is well-designed, interesting and carefully graded.

Live listening is very important in the context of our classroom situation. Students listen to and interact with the teacher.

The teacher uses English while —

- checking attendance
- telling students where to sit
- chatting to them
- organising the lesson
- controlling the class.

He gives students practice in listening and responding to spoken English.

The Role of the Teacher:

The teacher is here a facilitator. He helps students cope with the demands of listening material and tasks.

Pre-listening:

1. He introduces the subject briefly.
2. He tells students beforehand what to expect and what to listen for. He intends to help the students predict what the language would be about.
3. He deals with the vocabulary if any which might mar the success of the listening activity.
4. He gives them a simple listening task. Simplicity here implies conceptual readiness and interest readiness.
5. He defines the task clearly.
6. He gives them guiding questions to help the students concentrate on the main points of a dialogue.
7. He can show the students some pictures connected with the listening task.

While listening:

The teacher ensures that the learners are doing the task.

While reading aloud for listening comprehension the teacher decides how it should be spoken. He divides long utterances into small groups (breath groups or sense groups). He underlines words which carry the main stress. He also uses weak forms in speech.

Suggestions for the teacher:

1. Teachers should be creative with the tasks. They should not be confined by the suggestions in the textbook.
2. It is best not to have students practise listening in isolation, but rather as part of a multi-task event. Listening can lead on to discussion, reading, role play or language study.
3. Teachers should persuade students to listen to English as much as possible on their own.

Oral skills

According to Christopher Brumfit, the question for the teacher is: How much opportunity am I giving members of my class to talk as individuals to each other, using as much English as they can, to say things which they have decided to say and which are as far as possible in response to what has been said before? So there has been a growing emphasis on the teaching and learning of oral skills.

Oral skills have two major components – motor perceptive skills and interaction skills. Motor perceptive skills are developed through pattern practice. In such practice no context is provided. Learners develop these skills through repetition and choral drill. As a result a learner fails to transfer his knowledge from a language-learning situation to a language-using situation. On the contrary, using the interaction skills a learner is able to transfer his knowledge from a language-learning situation to a language-using situation. It involves knowing what to say and how to say this. As a result the controlled exercises have been replaced by meaningful oral practice.

Techniques in Teaching Oral skills.

1. A teacher can develop oral skills in a 'conversation class'. It is a question and answer session and is not always productive of learning.
2. The teacher can arrange for a topic-based discussion but it lacks a definite purpose and so learners do not feel adequately motivated.
3. Task- oriented practice is very useful. A group is given a task to perform through verbal interaction. The task should be simple, interesting and within the range of the experience of the learners. It may be in the form of a group activity or role play. Role play is a way of bringing situations from real life into the classroom.

Role of the Teacher in a Task- oriented Practice

Presentation:

Instructions should be crisp, clear and thorough. If learners fail to understand what is to be done a trial run can be conducted.

Process:

In a group work a learner has maximum participation. It should be planned in such a way that each member gets a chance to contribute. At times the learners may be asked to use certain language forms or structures while participating in the discussion.

The teacher moves freely around the room, giving advice and support when needed. He can clarify ideas and contribute to the content when necessary. He can also note mistakes for follow-up remedial work and help the slow learner.

Ending:

Learners may be asked to give an oral report. The task is rounded off by the teacher with suitable comments.

Speaking can be integrated with other skills. It arises from reading and listening and it can lead to a writing task. The group report can be given to the students as an assignment. Speaking activities enable learners to write competently on a theme they have collaboratively explored in a class.

In developing oral skills the role of the teacher in instilling confidence in the learner is very important. If the learner has no confidence, it leads to a 'downward spiral' where both the teacher and the student experience a sense of failure.

In meaningful oral practice the 'so-called non-communicative activities like drill and controlled practice have a valid place as they provide learners with the necessary prerequisite skills for more communicative language work. The teacher has to use both focused practices and communicative practices in the class. Some structural points present difficulties of form as well as meaning, and so it is better to deal with them during the focused practice before students are involved in communicative practice. Teachers should not forget the caveat offered by Swan : classroom is not the outside world. Widdowson also thinks that pedagogy is bound to be a contrivance. But it is to be remembered that even when there is form-focus in teaching, teachers should avoid doing everything for the learners because language learning requires learner's engagement and involvement.

Conclusion:

In developing aural-oral skills teachers should remember that there is no one-size-fits-all approach. A teacher teaches a particular group of learners pursuing a particular set of goals within a particular institutional context. So they should keep their eyes, ears and minds open to see what works and what does not. Random use of techniques has no merit. Teaching involves continual observation, reflection and action. In order to help learners learn, a teacher has to maximise learning opportunities and ensure meaningful learner-learner and learner-teacher classroom interaction.

Sample Lesson Plans

Broad objective: LSRW

Skill: Reading — Lesson 6 – The Selfish Giant (first three paragraphs)

Time: 40 minutes

Level: Class IX – Large class of mixed ability.

Previous Knowledge: Students have read narrative prose in simple English, mother tongue.

Procedure:

Teacher's Activity

Students' Activity

Pre-Reading stage

As a warm up activity,

1. List of adjectives supplied by teacher

Individual activity

Q. Which qualities would you
like to see in a person?

Brainstorming, Discussion.

Word 'selfish' is explained.

Categorizes adjectives into 2 groups.
qualities that one would like to see
/not like to see in a person

While-Reading Stage

To ensure individual learner involvement,

2. Teacher displays meanings
of some words on blackboard.

Silent reading – locate the
words from text, individually.

3. Literal and inferential comprehension
questions are asked.

Students answer, teacher assists and
ensures as much interaction as possible

4. Word meanings are discussed.

Post-Reading Stage

5. Worksheets are supplied with
comprehension questions.

Task done as pair work.

Teacher facilitates. Multilevel Worksheets
may be given, according to the
language ability of the learner.

Follow up: Exercises from text to be set for homework after discussion.

Broad objective: LSRW

Skill: Aural-Oral

Time: 40 minutes

Level: Class VIII – Large class of mixed ability.

Procedure:

1. Students are paired and each is given a card to write on.
2. They will ask each other what they used to do in Class VII.
3. Each will write down [in card] the answers of their partner from memory.
4. The pair that remembers the maximum number of each other's answers wins the game.
5. The teacher will encourage students to speak in English as much as possible. The activity must be monitored so that the conversations do not stop.



Broad objective: LSRW

Skill: Writing [Process writing Jute Processing]

Time: 40 minutes

Level: Class IX – Large classes of mixed ability.

Previous Knowledge: Passive voice, use of linkers.

Procedure:

<i>Teacher's Activity</i>	<i>Students' Activity</i>	<i>Rationale</i>
	Students silently read Lesson– "The Importance of Jute"	
	Individual activity.	Warm-up activity
Teacher asks questions– Brainstorming for ideas	Students answer individually.	Generating ideas
Teacher writes down Answers on blackboard – verbs used.		Speaking skills

<i>Teacher's Activity</i>	<i>Students' Activity</i>	<i>Rationale</i>
Gives clear directions for group formation [not more than 4 students]	Group activity Students arrange answers in logical sequence insert linkers	Composing
Teacher facilitates, discusses linkers to be used.	Groups attempt to write first draft-reading of first draft by leaders in class. Individual work- final draft written at home.	Rewriting, revising.

Feedback: The teacher corrects the rough drafts in class. Writing of the final draft is an individual activity and the scripts are corrected, keeping the following aspects in mind – organization of thought, vocabulary, and language use.

CTE ORIENTATION PROGRAMME

Subject : English

Dated : 26th & 27th May '06

Sl. No.	Name of Participants	Name of School
1.	Smt. Soma Das	Burul Girls' High School.
2.	Smt. Sanjukta Bharati	Sishu Mahal Girls' High School.
3.	Smt. Nibedita Kar Gupta	Alipore Multipurpose Govt. Girls' School
4.	Smt. Kaushiki Ray Chaudhuri	Behala Sharda Vidyapith for Girls'
5.	Smt. Tandrima Chattopadhyay	Kashinagar Girls' High School
6.	Smt. Dipika Paul	Alipore Multipurpose Govt. Girls' School
7.	Smt. Mahua Sengupta	Sakhawat Memorial Govt. Girls' H. School
8.	Dr. Lipika Sikdar.	Sakhawat Memorial Govt. Girls' H. School
9.	Smt. Arpita Banerjee	Bawali Pallimongal High School
10.	Smt. Piyali Banerjee	Jagat Ballavpur High School.

Worksheet – 21

Read the following passage and analyse the different item types that follow and complete the table:

In Mother House, as it is popularly known, the day begins at 4.30 a.m. The nuns foregather for a two-hour session of prayers and meditation followed by Mass. Then they get to work. There is an enormous amount of washing to be done as all the clothes and linen of the Home for the Dying, the Children's Home (Shishu Bhawan), the slum schools and the leprosaria are washed by the nuns. Each sister has her own bucket which, apart from her sari and books of prayer, is her only other possession. The hand pump in the courtyard is their main source of water. The bare slabs of the cement floor, their wash tub. After the washing is done, they have a quick breakfast. Just as the eastern horizon turns grey they set out on their jeeps, by tram-car, bus or on foot with supplies of powdered milk and medicine to their school dispensaries, home for unwanted children, lepers and Home for the Dying. Parties also go into the city's innumerable slums and railway stations looking for abandoned children, the hungry, diseased, destitute and the dying. So it goes on all day till late in the evening. They have an early supper followed by more prayer and meditation. The nuns retire to their dormitories. Mother Teresa's "bed room" is in the passage so that the light of her table lamp does not disturb her sisters. The lights are switched off at 10 p.m. Only Mother Teresa works on with her accounts and answers her correspondence which now runs into an average of 40 letters every day.

Set – A

i. Answer the following questions:

- (i) What kind of place is the Mother House?
- (ii) What are the earthly possessions of a sister of charity?
- (iii) What constitutes a typical day of a sister of charity?
- (iv) Why is the Mother's bedroom at the end of the passage?

Set B

II. Copy and complete the following statements briefly:

- (i) The nuns have to do a lot of washing because _____.
- (ii) The earthly possessions of a sister of charity are _____.
- (iii) Mother Teresa stays up beyond 10 p.m. in order to _____.

III. Read the summary of the passage and fill in each of the spaces with one word only.

The day begins _____ at the Mother House. After _____ they get ready for work. They have a lot of _____ to do. After washing and breakfast they go to work at _____ places where people are in _____. They come back in the _____, have _____ do and then go to _____. Only the _____ works-late.

IV. Look at the following statements. Write T for true, F for false or DK (don't know) if you can't tell from the text. Find supporting statements from the passage.

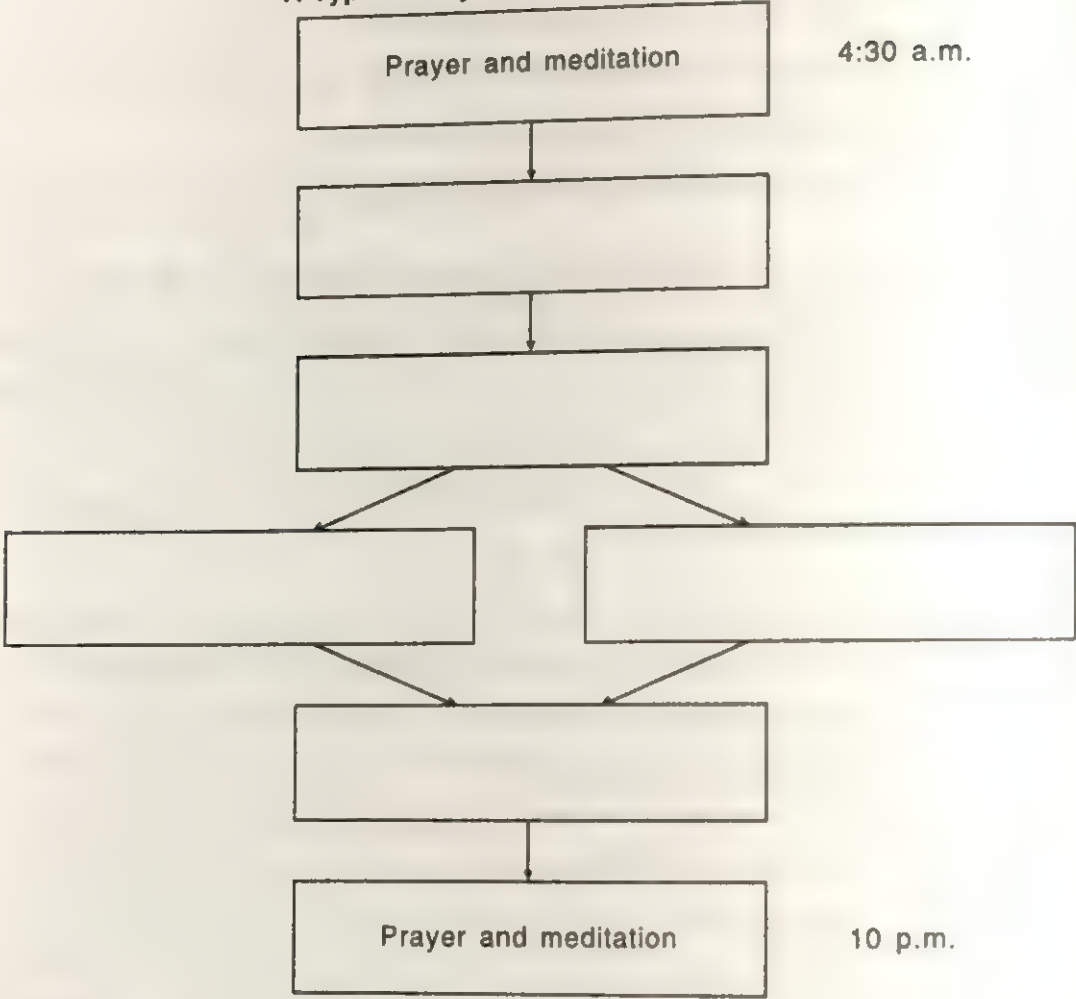
- (i) The nuns work very hard.
- (ii) The nuns only work in schools.
- (iii) The nuns live a life of luxury.

V. Choose the correct answer

- (i) The nuns stay at
 - (a) Shishu Bhawan
 - (b) Home for the Dying
 - (c) Mother House
 - (d) Leprosaria
- (ii) Mother Teresa's bedroom is in the passage so that the light does not disturb others. This means
 - (a) she is considerate
 - (b) she is selfish
 - (c) she is indifferent
 - (d) she is proud.

VI. Complete the flow chart after reading the passage:

A Typical Day of a Sister of Charity



Fill in this chart with your analysis:

Item Nos	I	II	III	IV	V	VI
Item type						
Skill taught						
Reading/writing/listening/speaking						
Whether challenging/interesting						
Yes/No						

Which item types do you prefer for teaching reading comprehension? Why?
Discuss in groups.

I. Sub-skills used to help develop reading abilities:

- (a) skimming
- (b) scanning
- (c) using background knowledge
- (d) using knowledge of the language system
- (e) deducing meaning from context
- (f) distinguishing main idea from subordinate ideas
- (g) using the ability to predict
- (h) recognising connectors and linkers (discourse makers)
- (i) inferring and connecting
- (j) evaluating and judging etc.

II. List of Task types:

Non-linguistic response:

- (a) following instructions (doing something)
- (b) arranging (sequencing) by using symbols
- (c) completing a map / drawing
- (d) putting a tick (checking)
- (e) making a graph
- (f) underlining / circling / putting a cross
- (g) labelling a diagram
- (h) tracing a route in a map
- (i) matching

Linguistic response:

- (a) filling in columns / matrix (using short responses)
- (b) labelling tree-diagrams / flow charts etc.
- (c) filling in gaps or blanks (with words / sentences)
- (d) making free notes
- (e) labelling paragraphs / functions of sentences
- (f) labelling attitudes and expressions
- (g) inserting headings / logical connectors
- (h) inserting missing information
- (i) answering short questions / open ended questions; / m/c type of questions; / T/F type of questions; etc.

Methodology of the Reading Lesson:

Aim : to reflect on the process that a teacher goes through in planning a reading lesson.

Study the Reading text given in the handout and the tasks that follow, Work in pairs and fill in the following chart:

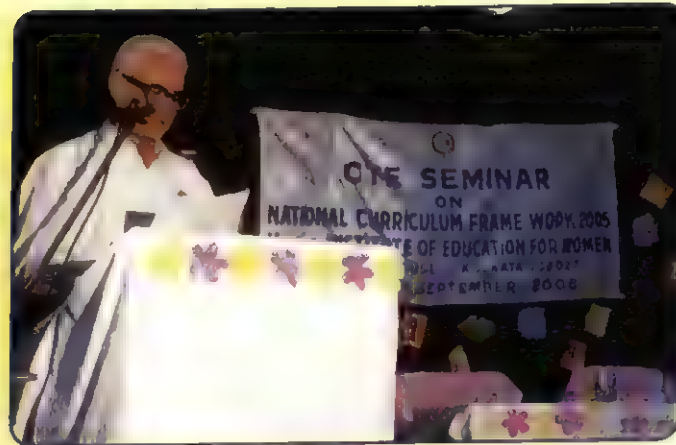
Ex. No.	Task type	Sub-skills involved	Focus (vocab/sent/context)	Skill (lsrw)	Stage	Teaching type or Testing type

There are six task types. Which task types do you prefer for teaching reading comprehension? Why? Discuss in groups.

**SEMINAR ON
NATIONAL CURRICULUM FRAMEWORK – 2005**



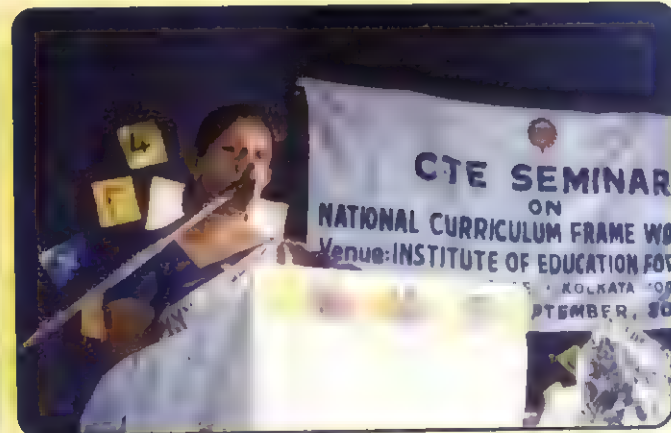
Lecture by Prof. Ranju Gopal Mukherjee



Lecture by Dr. Sitangsu Ray



Invited Address by Dr. Smriti Kana Majumdar



Key Note Address by Prof. Rajyasri Roy



Inaugural Address by Dr. Alpana Munshi



Resource Persons and Participants

SEMINAR ON NATIONAL CURRICULUM FRAMEWORK – 2005

PROGRAMME ON : 20-09-06

10:30	—	11:00 A.M.	:	Registration
11:00	—	11:10 A.M.	:	Introductory speech by Prof. Alpana Munshi
11:10	—	11:20 A.M.	:	Welcome Address by Prof. Nina Nandy, Officer-in-Charge, Institute of Education for Women, Felicitation, Hastings House.
11:20	—	11:25 A.M.	:	Inauguration by the Hon'ble Chief Guest Dr. Ranju Gopal Mukhopadhyay, Format Vice chancellor, North bengal University Ex-Chairman, Rabindra Mukta Vidyalay. Song
11:25	—	11:35 A.M.	:	Keynote Address by Prof. Rajyasri Roy
11:35	—	11:35 A.M.	:	Inaugural Address by the Hon'ble Chief Guest
11:55	—	12:00 Noon	:	Vote of Thanks
12:00	—	12:10 P.M.	:	TEA BREAK
12:10	—	12:30 P.M.	:	Lecture on — "Constructivist Learning Situation" by Dr. Subhalakshmi Nandi, Department of Education, Kalyani University.
12:30	—	12:40 P.M.	:	Discussion
12:40	—	01:00 P.M.	:	Lecture on — "Rethinking on Music Education in Tagoreon Lines" by Dr. Sitansu Roy, Visva—Bharati, Santiniketan
01:00	—	01:10 P.M.	:	Discussion
01:10	—	01:30 P.M.	:	Lecture on — "Assessment and Evaluation Procedure" by Dr. Debjani Sengupta, Department of Education, Calcutta University
01:30	—	01:40 P.M.	:	Discussion
01:40	—	02:10 P.M.	:	LUNCH BREAK

02:10	—	02:30 P.M.	:	Lecture on — "Curriculum without Burden" by Dr. Rita Sinha, Department of Education. Calcutta University.
02:30	—	02:40 P.M.	:	Discussion.
02:40	—	03:00 P.M.	:	Lecture on — "Curriculum Renewal for Teacher Education" by Prof. Tapas Mitra, Officer-in-Charge, Institute of Education (PG) for Women, Chandernagore.
03:00	—	03:10 P.M.	:	Discussion
03:10	—	03:20 P.M.	:	TEA BREAK
03:20	—	03:30 P.M.	:	Presentation of Paper on — "Value of Interaction" by Dr. Jayashree Banerjee, David Hare Training College, Kolkata.
03:30	—	3:40 P.M.	:	Presentation of Paper on — "Participation for all Children" by Prof. Kaushik Chatterjee, ABTT College.
04:00	—	04:30 P.M.	:	Valedictory Address — by Dr. Smritikana Majumder, Institute of Education for Women, Hastings House, Kolkata.

Introductory Speech at CTE Seminar on National Curriculum Framework – 2005

By

DR. ALPANA MUNSHI

To our respected chief Guest Prof. Ranju Gopal Mukherjee, Former Vice-Chancellor of North Bengal University, distinguished resource personalities Dr. Subhalakshmi Nandi from Kalyani University, Dr. Sitansu Ray Visva Bharati, Santiniketan, Dr. Debjani Sengupta and Dr. Rita Sinha from Calcutta University, Prof. Tapas Mitra from Institute of Education (PG) for women, Chandernagore, Principals of different training colleges, educationists and friends, who have responded to our invitation to be present at this seminar. To all of you I offer my sincere salutations.

I fully realise the inadequacy of my equipment to speak with authority and authenticity, at a gathering in which we have very knowledgeable personalities and other experts in their respective fields. Nevertheless, I have ventured to take this opportunity of sharing with all of you certain carefully considered thoughts, on a subject of importance and significance to all of us — 'National Curriculum Framework – 2005'.

National Curriculum Framework – 2005 is an excellent guideline to meet the challenges of the time by improving the quality of education in all directions and making its benefits available to all people. To meet the purpose, a National steering Committee was set up under the Chairmanship of Prof. Yash Pal in the year 2004. The steering Committee recommended partnerships between the school system and other civil society group, including non-governmental organisations and teacher organisations.

Today's seminar is the second phase of CTE Programme of our Institution. The Topic of this September Assembly of CTE was finalised in the meeting of Teaching Faculty of our College in the month of April, 2006. Prof. Nina Nandy, Officer-in-charge of our Institution was the Chair person of that meeting. She gave us guidance to organise this seminar from time to time.

Institute of Education for Women, Hastings House has successfully organised its first phase of CTE Programme from 22nd May, 2006 on different school subjects; e.g. Mathematics, Sanskrit and English respectively.

Mathematics workshop-cum-orientation programme was based on the topic "Improvement of teaching Mathematics in secondary schools using mathematics laboratory" under the co-ordinatorship of Dr. Mili Das. The workshop on "The new techniques of teaching Sanskrit Language" was organised by Prof. Gita Mukherjee and another workshop on "using Language Text book to develop specific language skills" was organised by Prof. Aparna Chakraborty.

In the key-note address Dr. Sujata Raha focused on the main objectives of CTE.

It is with feelings of extreme happiness that I am to announce here, today the second phase of CTE programme of our Institution will be inaugurated by Prof. Ranju Gopal Mukherjee within a short while.

Thank you.

Key Note Address

By

PROF. RAJYASRI ROY

The National Curriculum Framework – 2005 is a remarkable initiative taken by the N.C.E.R.T to focus public attention on what should be taught to schoolchildren and how. The NCF-2005 owes its present shape and form to the flurry of ideas generated through a series of intensive researches, deliberations and thoughtful experimentations made by eminent scholars from different disciplines, principals, teachers and parent representatives of NGO's, NCERT faculty and several other stake-holders at various levels. Significant contributions were made by State Secretaries of Education and Directors of SCERT's and also by participants of regional seminars organized by the Regional Institutes of Education of different States. Also valuable experiences were shared by the Principals of private schools, Kendriya Vidyalayas and teachers of rural schools across country to enrich this framework.

The retrospect behind the formulation of this framework shows that in spite of recommendations of NPE-1986, POA-1992, to identify competencies and values to be nurtured at different stages, school education is still examination based on information-loaded textbooks. Despite the review of curriculum Framework in 2000 the vexed issues of curriculum load and tyranny of examinations remained unresolved. The review NCF-2005 exercise takes into cognizance both positive and negative developments in the field and also attempts to address the future requirements of school education at the turn of the century. In this endeavour several interrelated dimensions have been kept in mind, namely the aims of education, the social milieu of children, the nature of knowledge in its broader sense, the nature of human development and the process of human learning.

The NCF-2005 opens with a quotation from Rabindranath Tagore's essay Civilization and Progress in which the poet reminds us that a creative spirit and generous joy is key in childhood, both of which can be distorted by an unthinking adult world. The NCF-2005 through its propositions extends a sincere promise to uphold both generous joy and creative spirit in the process of imparting education to children. The framework asserts that education should aim at organizing knowledge and not transmission of facts. In view of Yash Pal, Chairperson of the Steering Committee of NCF-2005.

"Education is not a physical thing, but it is always created, rooted in the physical and cultural soil of the child and nourished through interaction with teachers, parents and fellow students".

The fact that learning has become a source of burden and stress on children and their parents is an evidence of a deep distortion of educational aims and quality. NCF-2005 in an attempt to correct this distortion proposed five guiding principles for curriculum development —

- 1) Connecting knowledge to life outside the school.
- 2) Ensuring that learning shifts away from the rote methods.
- 3) Enriching the curriculum so that it goes beyond textbooks.
- 4) Making examinations more flexible and integrating them with classroom life.
- 5) Nurturing an overriding identity informed by caring concerns within the democratic policy of India.

In all familiar areas of teaching viz., language, mathematics, science, social science, art & craft, work education, physical and health education, peace, significant changes are recommended with a view to make education more relevant to the present day and future needs and to alleviate stress with which school children are coping today. NCF-2005 suggested softening of subject boundaries so that children get a taste of integrated knowledge and joy of understanding.

The most unique feature of NCF-2005 is that it inspires new forms of knowledge and creativity. It emphasizes that learning should be related to activities in such a way that work transforms knowledge into experiences and generate important personal and social values, such as self-reliance, creativity and co-operation.

In today's seminar we will concentrate on aspects, which are very much vital to the mind of the young learners but have been very little discussed so forth. We will focus on aspects which would help to reduce the tyranny of school education, which would transform both teaching and learning into joyful experience, methods which would infuse creative spirit among learners and how to cultivate students' potential so as to attract students' interest to school education, to eliminate school phobia and elicit spontaneous participation in the classroom process.

Outline of address by the Chief Guest at the Inaugural session of the seminar on
National Curriculum Framework, 2005

Prof. RANJU GOPAL MUKHERJEE

*Former Vice-Chancellor,
North Bengal University*

Respected President of this session, esteemed guest, learned members of faculty, delegates and participants,

I congratulate the authorities of this prestigious seat of learning for organizing this on an issue of relevance to our school education system. I also express my gratitude for kindly inviting me as the chief guest in its inaugural session. I hope the organizers will appreciate the difficulty of a guest on this part of the programme to meaningfully analyse a voluminous, the "National Curriculum Framework 2005" as desired by them. I would, therefore, like to dwell more on the historical backdrop and the context of the document then on its specific contents.

The Historical Background

NCERT took initiative to examine variations in standards of the on-going school education in different states of India. The study brought to light undesirable disparities and indicated the need for preparing a core-curriculum for the nation as a whole. A preliminary structure was developed through discussion and consultation in 1985. However, by then several new ideas were thrown up by the New Education policy. In this changed scenario, the draft was reviewed, modified and published in its final shape in 1988 under the title "National Curriculum for Elementary and Secondary Education – A framework". At that time, it was decided that the document shall be reviewed and updated every five years. For reasons not known, this was not done until a new political combination, the National Democratic Alliance, came to power at the centre. This Government led by the Bharatiya Janata Party, was eager to inject its ideological components into school education and took little time to overhaul the system by presenting a new NCF in 2000 and also redrafting syllabi and text materials on several subjects. Their pronounced Hindutva bend triggered off nation-wide debate and fierce controversy. After the UPA Government led by the Congress Party was elected to power, there were loud demands from secular sections of the society for scrapping these documents and replacing them with new ones. The document under discussion in today's seminar is the outcome of elaborate preparation in response to that national sentiment. Any study of NCF 2005, detached from these backdrop, is likely to be somewhat incomplete, if not misleading.

The Context

The NCF 1988 tried, with considerable success, to identify and analyse the major social and economic issues that school education would be expected to address. A few of these may be highlighted here :

1. The document described education as an instrument of social transformation and also pointed out its vital role in national development.
2. While expressing concern over erosion of values in society, it emphasized the urgent task of character-building and inculcating social and moral values.
3. Taking note of the disparities among different sections of people in our society, the document laid special emphasis on the need to provide equality of educational opportunity.
4. The document drew attention to promotion of scientific temper in the pupil.
5. It advised adoption of a Child-centric Approach to Education, facilitating 'Learning How to Learn' and also Continuous and Comprehensive Evaluation-concepts, the practice of which seems to be eluding us even to day.
6. The document contains clear recommendation for introducing the course on Work Experience in order to bridge the gap between the world of study and the world of work. The main purpose of this component of the curriculum was seen as developing healthy attitudes and values like respect for manual labour and work ethics.

Based on these and several other tenets, NCERT envisaged a national system of education reflecting the principles embodied in our Constitution. Such a system should seek to ensure that 'up to a given level, all pupils, irrespective of caste, creed, location or sex, have access to education of a comparable quality'. (NCF-1988, P.10).

These formulations provided the major context of the two subsequent endeavours by NCERT. The palpable aberrations noticed in parts of the document published in 2000 added a new dimension to the Council's task in preparing this latest version of the NCF.

Some Salient Features of NCF – 2005

I now propose to highlight a few – only a limited few–of the salient features of the National Curriculum Framework 2005.

1. The present document is free from the pernicious distortions that polluted the earlier one (NCF-2000). This has come as a great relief to all secular and democratic minded citizens of the country.
2. The document has made an honest effort to narrate the sorry state of our school education system as evidenced by rates of literacy, school dropouts and the conditions of our rural schools.
3. Referring to the 86th Amendment of our Constitution declaring Elementary Education as a Fundamental Right of all children in the age-group of 6-14 years, the document has candidly expressed unhappiness over the unfortunate exclusion of children below 6 years of age from the purview of Article 21.
4. While enumerating the basic Constitutional Principles, the document states, "India is a secular democratic state", thereby omitting another major pillar: India is also a socialist state. The council's aversion to the term "socialism" is indeed

inexplicable particularly when we find the previous, and admittedly reactionary, formulation of 2005 declaration, under the head of General Objectives of Education, that "It must also lead to a non-violent and non-exploitative social system" (Page No P.39, para 2.5). However, this statement was borrowed, almost verbatim, from the World Declaration on Higher Education, 1998.

5. Regarding relevance of the total socio-economic situation to the spread of basic education, one finds this highly significant observation; '...we must realize the importance of other sectors of the state's social policy for supporting and facilitating the achievement of UEE'. The message is clear and unmistakable.
6. In the same context, the document has drawn attention to the dangerous consequences of globalization and domination of market forces in all spheres of social life. It has not hesitated to point out the government's steady withdrawal from its responsibility thereby strengthening or leaving room for increasing privatization and commercialisation of education. It has cautioned us 'to be vigilant about the pressures to commodity schools and application of market-related concepts to schools and school quality'.
7. A novel and valuable recommendation placed in the document is 'Education for Peace'. As the context for this suggestion the NCF cites the present age characterized by 'unprecedented violence with constant threats posed by intolerances, fanaticism, disputes and discordances. Ethical action, peace and welfare are facing new challenges'. Of course, the implication of this welcome proposition deserves scrutiny. Importance of peace as the guarantee for progress, nay survival of human civilization needs no elaboration. But a few related issues should be clearly understood in this connection. First, education for peace has to be imparted more for attitude and habit-formation than for skill development. Hence, it should be treated as an integral part of the total value-system that is sought to be nurtured through all kinds of schools activities—curricular as well as co-curricular. Secondly, the spirit to fight for peace cannot be aroused and sustained without realizing the causes that breed violent and destructive mentality in tender minds. Young children should be sensitized to be the socio-cultural milieu infected with disparity, injustice, exploitation, unequal opportunity and other maladies which are responsible for breach of peace at different levels. An informed and inquisitive learner may want to know the cause of the savage war in Afghanistan or Iraq. It would be unethical for the teacher to evade the real answer in the name of keeping out of politics. Discouraging students to ask such questions would be inimical to the cause of peace. In the third place, we must find out effective way to curb the poisonous role of modern media in alluring tender minds to the path of violence and aggression.

I conclude with these words, and hope that the learned participants will do full justice to the task by delving deep into the specific provisions of National Curriculum Framework – 2005.

Constructivist Learning Situation

DR. SUBHALAKSHMI NANDI

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The 1986 National Policy of Education (NPE) and the 1992 Programme of Action assign a special role to the National Council for Educational Research and Training (NCERT) in preparing and promoting a National Curriculum Framework. The policy views such a framework as a means of establishing a National system of Education, characterized by certain core values and transformative goals which might be consistent with the Constitutional vision of India. Accordingly, NCERT has prepared and published a new document called 'National Curriculum Framework for School Education' intending to provide joyful learning experiences to our school children through 'learning without burden'.

A good curriculum framework should be a system of most basic principles and assumptions, capable of providing rational basis for curricular choices. Curricular choices are not limited to just what should be taught, but indicate choices regarding how to teach, under what conditions, by whom, with what teaching aids, how the evaluation should be carried out, and so on. In other words, the spectrum of choices which define what schools should be doing and how.

In the NCF, a good attempt is made in the second chapter, in the section on characteristics of a learner, where the 'Child-learner' has been viewed as 'a constructor of knowledge'. All through the chapter, 'Constructivist Psychology' in the process of learning is scrupulously favoured, and the present lecture will follow these constructivist principles in order to deal with the topic, constructivist learning situations'.

Constructivism represents a paradigm shift from education based on behaviourism to education based on cognitive theory. Constructivist epistemology assumes that learners construct their own knowledge on the basis of interaction with their environment. Constructivist learning, therefore, is a very personal endeavour, whereby internalized concepts, rules, and general principles may consequently be applied in a practical real-world context. Constructivism values student's point of view, requires higher-level questioning, values process of student thinking rather than student answer or product. In 'Constructivist Learning' (CL), students use experiences to discover learning for them. CL develops critical thinking and complex reasoning skills, and promotes active participation of learners. In recent decades, constructivist theorists have extended the traditional focus on individual learning to address collaborative and social dimensions of learning.

In order to provide selective and organised learning experiences, which is an essential function of curriculum transaction, classroom teaching-learning process needs to create adequate and substantial learning environment in general and learning situation fit to the very nature of the curricular content in particular. If T-L process is to promote

CL, the learning situation should go at par with that nature, and for this, following points are to be borne in mind :

CL is by nature 'Problem-Based Learning' and it requires 'Anchored Instruction', and PBL and AI is a student-centred, contextualised approach. In this approach, learning begins with a problem to be solved rather than content to be mastered. The concept of anchored instruction emphasizes the importance of creating an anchor or focus that generates interest and enables students to identify and define problems and to pay attention to their own perception and comprehension of these problems.

CL claims 'Distributed Cognition' which emphasizes a reciprocal process– the interaction among individual, environment, and cultural artifacts.

CL is based on 'Cognitive Flexibility Theory' which suggests that people acquire knowledge when he visits, and more importantly revisits, the same case or concept information in a variety of contexts.

CL requires 'Cognitive Apprenticeship', a term for the instructional process that teachers provide and support students with scaffolds as the students develop cognitive strategies. Its core characteristics are heuristic content, situated learning, modelling, coaching, articulation, reflection, exploration, and order in increasing complexity.

CL is characterised by 'Situated Cognition', a new paradigm of learning, which emphasizes apprenticeship, coaching, collaboration, and multiple practice, articulation of learning skills, stories, and technology. "Community of practice", a concept emerging from situated cognition, emphasizes sharing and doing, construct meaning in a social unit. Similarly, 'Collaborative Learning' is another feature of CL where students share responsibility with each other (and possibly the teacher) to come up with methodologies, tasks, assessment, etc., in the attainment of a particular goal.

CL is 'Self-Regulated Learning' where the learner is the initiator of the learning process, an active agent who through his/her metacognition constructs and reconstructs knowledge.

If above is the very nature of CL, than the 'Constructivist Teaching' definitely bears some special individuality. This type of teaching allows students to "interpret" their experiences in class and try to make sense of them. There is no one single methodology that is called "constructivist teaching". Constructivist teaching is not limited to discovery learning (where students learn through discovery) nor does it necessarily imply that lecturing cannot be part of constructivist teaching. It only implies the need to diagnose what is already in the student's mind (usually used to initiate instruction) and that the focus is on student learning rather than teacher teaching. In neither case does it specify how.

On the basis of the aforesaid groundwork, a teacher can proceed for 'constructivist learning situations'. CLS honours the common assumptions of constructivism and focuses on the development of situations as a way of thinking about the constructive activities of the learner rather than the demonstrative behaviour of the teacher. To create CLS, a number of different teaching practices in the classroom are necessary. It usually means

encouraging students to use active techniques to create more knowledge and then to reflect on the talk about what they are doing and how their understanding is changing. The teacher makes sure that he/she understands the students' preexisting conceptions, and guides the activity to address them and then build on them. By questioning themselves and their strategies, students in this learning situation ideally become "expert learners". With a well-planned constructivist learning situation, the students learn how to learn. This learning situation functions as a spiral, and the students develop increasingly strong abilities to integrate new information. Here, teacher's main role is to encourage this learning and reflection process.

In practice, Constructivist Learning Design emphasizes six important elements: Situation, Grouping, Bridge, Questions, Exhibit and Reflections. Teachers develop the situation for students to explain, select a process for groupings of materials and students, build a bridge between what students already know and what they want them to learn, anticipate questions to ask and answer without giving away an explanation, encourage students to exhibit a record of their thinking by sharing it with others, and solicit students' reflections about their learning.

In the NCF-2005, CLS has been arranged as follows (Ch.-2, p.-19): Situation – Observation – Contextualisation – Cognitive Apprenticeship – Collaboration – Interpretation/Construction – Multiple interpretations – Multiple manifestations. Like any other learning situation this arrangement is neither linear nor consistently downward rather spiral. In each and every phase teacher has some definite role to play as a 'facilitator'. For planning and conducting CLS, teacher has to deal with the following questions in advance –

- What situation am I going to arrange for students to explain?
- How am I going to make groupings of students? Arrange groupings of materials?
- What type of initial activity will be done in order to determine students' prior knowledge and to build a "bridge" between what they already know and what they might learn by explaining the situation?
- What types of different questions will be set up to introduce the situation and to keep thinking going?
- How shall I guide the collaborative learning? How shall I make students 'Exhibit' for others of how they recorded their explanation?
- How shall I solicit students' reflections about learning? What attitudes, skills and concepts will students take out the door? What did students learn today that they won't forget tomorrow? What did they know before; what did they want to know; and what did they learn?

In real classroom set up, teacher may be successful in creating CLS by –

- Generating thematic topic plans on the basis of curricular content;
- Ensuring students' participation in classroom discussion through application of principles of 'cognitive apprenticeship';

- Arranging and guiding the learning situation for exposure of multiple perspectives on a very familiar realistic issue which is otherwise a matter of opinion;
- Shaping the learning situation through planned stimulation like emphasizing contrast, stimulating informed guessing, arousing awareness towards meaning making;
- Conducting the learning situation for an all-class discussion finally,
- Allowing children to ask questions instead of answering only;
- Encouraging intelligent guessing of children;

and a number of such practices which teacher thinks and feels appropriate in favour of CLS.

In a word, CLS requires 'critical pedagogy' in classroom T-L process which needs to be 'participatory' in nature. CLS can be adapted to any subject area or curriculum by involving students as active participants in making meaning instead of passive recipients of information given to them by the teacher. This approach can be incorporated into 45 to 50 minutes class periods to teach a particular concept, skill, or attitude. To be successful, flexible curriculum, teacher preparation, textbook preparation and reformation in evaluation system are some of the necessities.

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Rethinking on Music Education in Tagorean Lines

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FOREWORD

I am very happy to be here with you on the occasion of this seminar. Let me express my sincere gratitude to this prestigious Institute of Education for Women for kindly inviting me for speaking something. I am particularly very much grateful to Dr. Alpana Munshi who took the initiative to contact me, to draw me out from my obscure existence after retirement. Both of us belong to the same *Alma Mater* i.e., Visva-Bharati Sangit-Bhavan. Kala Bhavan is adjacent to it that is to say that we spent our days in the environment of art education, the theme of this very seminar. There is close relationship among the arts, especially between the performing arts like music and dance, and, the visual arts like painting and sculpture. For example, in the annual convocation, while Sangit Bhavan is leading the choir *Tamisvaranam Paramam Mahesvaram*¹, Kala Bhavan is entrusted with picturesque stage-setting and decoration of the venue. Against, in the spring festival, while Sangit Bhavan is leading the dance procession *Ore grihabasi, khol dwar khol*, Kala Bhavan has already dressed the dancer boys and girls most aesthetically. While Sangit Bhavan is rehearsing devotional songs for annual congregation of the seventh paus, Kala Bhavan is drawing auspicious alpana on Maharshi's altar under the chhatim tree.

ART/MUSIC EDUCATION: WELCOME DRIVE OF N.C.F.

Now let me come to the theme of the seminar, i.e., art-education in the context of national curriculum framework. I shall emphasize on music education since music is the finest of all the fine arts and I am a humble student of music throughout my life.

I have thoroughly gone through the executive summary of the national curriculum framework as enclosed in your letter. The well-thought framework starts with the well-understood Tagorean concepts of 'creative spirit' and 'generous joy', inherent in children. We may add in Tagorean terms:

"Man has a fund of emotional energy which is not all occupied with self-preservation. This surplus seeks its outlet in the creation of Art, for man's civilization is built upon his surplus".²

Furthermore, by virtue of love, hope, and "longing for the touch of the divine in man", man is "the music-maker", "the dreamer of dreams", the designer of paradise". By virtue of realization of beauty, man is "the builder of the heaven".³

Along with language, literature, mathematics, physical science, social science, the National Curriculum Framework has given proper importance to health and physical education and peace, heritage crafts and last but not least, the arts. Music, dance, visual arts and theatre all these vast areas are clustered together in a single concept, i.e., art education. I wonder, how much viable will it be. Let me speak on music education.

TAGORE-STAPLETON CORRESPONDENCE

As early as in 1928 Prof. H. E. Stapleton, the British D.P.I., posted in Calcutta, invited Rabindranath Tagore in a meeting in the Writers' Buildings for seeking suggestions for starting music education in schools so as to include music in the Matriculation Examination in Calcutta University. On account of ill health Rabindranath could not attend that meeting. But he wrote a letter to Prof. Stapleton expressing his views and suggestions. I am quoting just a little portion of this letter, copied from the Rabindra Bhavan Archive.

"I do not think that we have in Bengal at present any organization competent enough to undertake the training of teachers of music. I feel that the work should be done well or not at all. If I may suggest it I would request you to ask the help of Mr. Bhatkhande in the organization of a proper school of music where classical Indian Music could be taught. Mr. Bhatkhande is not a mere musician but has a wide scholarship and his name is an honoured one amongst people interested in Indian Music. He organized the Lucknow School of Music, which is doing really valuable work. I feel sure under his guidance we would have a number of competent teachers properly equipped to teach classical Indian music in the schools of Bengal".⁴

I don't know who were the other expert members, invited by Prof. Stapleton in the meeting. Perhaps the Writers' Building archive, if properly preserved, may be a source of all information. Prof Stapleton, despite his good intention, was unable to establish music faculty in Calcutta University. On the contrary, Rabindranath got unduly entangled into unpleasant web of criticism from some corners of the singers of Bengal. Rabindranath once again expressed his views in his article বিশ্ববিদ্যালয়ে সংগীতশিক্ষা published in the Agrahayan 1335 issue of Prabasi.⁵

I cite this episode only to point out that in the field of music education there was crisis at the very genesis. Crisis in some form or other has always been going on since then. During those days there might have been dearth of properly trained classical music teacher in Bengal. Days are changed now. Two of our universities are well equipped with full-fledged music, dance, theatre and fine arts faculties. Quite a number of graduates, post graduates and even some doctorates are coming out every year. But where are there suitable openings for them?

UGC CURRICULUM DEVELOPMENT PROGRAMME

Apart from the National Curriculum Framework, initiated by NCERT, the UGC Curriculum Development Committee also highly recommends music education from the very school level so that the colleges and universities of the whole country can admit promising students. Tragedy lies in the fact that recommendations are scarcely implemented, plans are rarely executed, and, human resource in the field of fine arts and music are most scantily utilized in the service of the nation. The Ministry of Human Resource Development, Ministry of Culture and Ministry of Education should ensure gainful employment and encouraging opportunity for the talented artists and academicians. At the initial stage all schools should have music teachers. Otherwise

curriculum framework, curriculum development, high-sounding preambles to them and vague promises at their end-notes remain useless in the files of the proceedings.

NEW EDUCATION FELLOWSHIP OF BYGONE DAYS

It will not be out of place to mention that in the third decade of the twentieth century the New Education Fellowship was established internationally for the furtherance of progressive education in different parts of the world. The Bengal branch of New Education Fellowship started its work under the Presidentship of Rabindranath, its Secretary being D.M. Sen. The functioning of the New Education Fellowship in Bengal under the title নব শিক্ষা সংঘ⁶ became a part and parcel of the Bengal Education Week observed in February 1936. The programmes were held in the Senate Hall of Calcutta University. On the very first day (February 8, 1936) Rabindranath delivered his lecture শিক্ষা ও সংস্কৃতিতে সংগীতের স্থান⁷ the purport of which is very much relevant even today. Let me quote just a little from it:

“আমাদের দেশের শিক্ষা বিভাগ কলাবিদ্যার সম্মানকে শিক্ষিত মনে স্বাভাবিক ক’রে দেবেন এই নিবেদন উপস্থিত করবার অভিপ্রায়ে এই ভূমিকামাত্র আজ প্রস্তুত ক’রে এনেছি। আর যা কিছু আমার করবার আছে সে নানা অসামর্থ্য সত্ত্বেও আমার বিদ্যালয়ে আমি প্রবর্তিত করেছি।

মানুষ কেবল বৈজ্ঞানিক সত্যকে আবিষ্কার করেনি, অর্নিচনীয়েকে উপলব্ধি করেছে। আদিকাল থেকে মানুষের সেই প্রকাশের দান প্রভূত ও মহার্ঘ। পূর্ণতার আবির্ভাব মানুষ যেখানেই দেখেছে—কথায়, সুরে, রেখায়, বর্ণে, ছন্দে, মানবসম্বন্ধের মাধুর্যে, বীর্যে—সেইখানেই সে আপন আনন্দের সাক্ষ্যকে অমরবাণীতে স্বাক্ষরিত করেছে। শিক্ষার্থী যারা, তারা সেই বাণী থেকে বঞ্চিত না হোক এই আমি কামনা করি।”⁸

So, we see that the contents and ideals of the latest National Curriculum Framework is not at all new and novel to us. Far ago, Rabindranath had pronounced all these.

EDUCATION WEEK: TAGORE'S ROLE

In the last session of the New Education Fellowship, i.e., on the last day of the Education Week, Rabindranath delivered his address শিক্ষার সার্বস্বিকরণ⁹ in the very Senate Hall of the Calcutta University. Its English version, in short, under the title “Education Nationalised” was published in Visva-Bharati Bulletin No. 20, 1936 which might have been a guiding force of the National Curriculum Framework. Education should be combined with an ideal way of life and never confined to classroom alone. In this very Education Week, Rabindranath delivered a lecture in English under the Chairmanship of Lord Bishop, Metropolitan of India. In this lecture, entitled “The Ideal of Visva-Bharati”, Rabindranath pronounced that peace cannot be constructed through political manoeuvring, “but peace can only be realized in the spiritual revelation of man whose inexhaustible wealth is in his own fulfilment”.¹⁰ Just see that in the National Curriculum Framework, peace education as an area of study is recommended for both the children as well as for their teachers.

MUSIC EDUCATION FROM PRE-PRIMARY ONWORDS:

Let me come back to music education again. I have learnt from experience that possible aptitude for musical tune in children sprouts prior to learning of the alphabets, nay, prior to even proper articulation and diction while trying to pronounce words and sentences. So, music education should start from pre-primary level and should be

compulsory upto class eight. That does not mean that all the students will become excellent solo singers. That means that a grand school-choir will be formed for the prayer session, ceremonies, functions and festivals under the guidance of a good and well-trained teacher. That means that some budding talents among the average whole will have their chance to cultivate their tonal practices. Quality control for individual care may be adopted in class nine so as to form a selected group for methodical training in elective/optional/additional music. Some of them will be able to take up music as a combination subject during their higher secondary or pre-degree or intermediate or, what is called now, plus two stage. This far is upto the purview of NCERT. Thereafter starts the area of U.G.C.

Well chosen musical talents from the successful students of the plus-two stage will be admitted into B.A., B.Mus. or B.P.A. with Honours in music or with music as a combination subject. Another screening will have to be done at the entry of the Master's degree in music. Music classes in the University level must not be overcrowded. Personal care of the Gurukul system should be applied in the universities so that well educated academicians may become good artists at the same time. Another quality control screening should be adopted for the research degree. Individual and joint research projects may be carried on under able guidance. Along with specialization in one's own field, one should have acquaintance with music of other kinds and of other cultures as well. Rabindranath, in his same letter to professor Stapleton, wrote :

ACQUAINTANCE WITH EUROPEAN MUSIC

"I would also like you to consider whether some opportunity may be given for the students to listen to good European music. European literature has helped in quickening Indian literature and it is likely that Indian music might be equally stimulated by the influence of western music".¹¹

Rabindranath suggested these lines for 'the proper training of teachers in Bengal'.

TAGORE-ROLLAND

During an intimate dialogue with Romain Rolland, Rabindranath told him:

"The starting points for all arts, poetry, painting or music, is the breath, the rhythm which is inherent in the human body and which is the same everywhere, and is therefore universal. I believe musicians must often be inspired by the rhythm of the circulation of blood or breath. A very interesting study would be a comparison of four tunes of different countries."¹²

This kind of study as a research project awaits to be taken up by able and well-advanced music scholars.

TAGORE-WELLS

In Tagore-H.G. Wells dialogue also we find some interesting insights. While Rabindranath says, "Music of different nations has a common psychological foundation",¹³

Wells adds, "Music is of all things in the world the most international".¹⁴ This dialogue can pave the way towards a joint research project to be carried on by a chosen group of musicians of some chosen countries.

CULTURAL RELATION WITH OTHER COUNTRIES

Healthy give-and-take of music academicians between two different countries or rather among various different countries is a great need today. I.C.C.R. has been founded, for this very objective and purpose. The universities also have their unassigned grants for promoting international acquaintance and scholastic interaction. The present incumbents of music faculties of colleges and universities should make the best use of these facilities.

WITHIN INDIA

In our own country too, we should know each other, one another, despite our own fields of specialization. Hindustani musicians and Karnatic musicians should be able to appreciate each other's way of performance and wealth of knowledge. Despite maintaining one's own identity and characteristics, one should at least learn to appreciate the other. Reciprocal understanding will enrich our artistic milieu.

PUBLIC OUTREACH PROGRAMME

Public Outreach Programme and Music Appreciation Course may be organized for promoting interest in music among general public. It is a pity that even among educated mass there are quite a large portion of them musically illiterate. I shall give you just one shameful example. In many a wedding festival shahnai cassettes available in the market are played. But, owing to illiteracy in our classical music we are forced to listen to Purabi in the early morning, Bhairab in the evening and Brindabani Sarang at midnight. Indian classical music is an invaluable gem of Indian culture. Its artistic rendering may be reserved for the talented artists but its appreciation should reach all the citizens.

Before conclusion let me once more refer to Rabindranath's lecture on the place of music in education and culture (i.e., শিক্ষা ও সংস্কৃতিতে সংগীতের স্থান). Along with classical music he also insisted on proper cultivation of variegated folk songs of our country. In his own words.

FOLK MUSIC

"এই তো গেল উচ্চ সংগীত। জনসংগীতের প্রবাহ সেও ছিল বহু শাখায়িত। নদীমাতৃক বাংলাদেশের প্রান্ত-প্রান্তে যেমন ছোটো-বড়ো নদী-নালা ঘোড়ের জাল বিছিয়ে দিয়েছে, তেমনি বয়েছিল গানের ঘোড় নানা খারায়। যাত্রা, পাঁচালী, কথকতা, কবির গান, কীর্তন মুখরিত করে রেখেছিল সমস্ত দেশকে। লোকসংগীতের এত বৈচিত্র্য আর কোনো দেশে আছে কি না জানিনে... বাঙালীর ভাবপ্রবণ হৃদয় অত্যন্ত তৃপ্তিত হয়েই গান চেয়েছিল, তাই সে আপন সহজ গান আপনি সৃষ্টি না করে বাঁচেনি।"¹⁵

HARAMONI

Rabindranath's favourite folk songs include Baul, Sari and some other genres as well. He requested the readers of Bharati to collect folk songs from their own regions

and send them to the editorial office.¹⁶ This kind of enthusiastic endeavour was reinstated in the column called "Haramani" of the journal Prabasi.¹⁷ It is interesting to note that Gagan Harkara's song Ami kothay Pabo tare, amar moner manush je re was collected by Rabindranath and was published in Prabasi as the opening song of the column "Haramani". Subsequently more than twenty songs of Lalan Phakir, collected by Rabindranath, were also published in the issues of Prabasi. We may reinstate such a collection of folk music in college and university Journals.

CONCLUDING WORDS

I have surpassed, in my discussion, the arena of NCERT's NCFSE from both the sides. I have started from pre-primary stage and reached upto the Master Degree Level, nay, upto the Doctoral height. Instead of school-college-university alone, I am enthusiast of public outreach programme for promotion of musical literacy among Indian citizens. Instead of confining ourselves to the national confines only, I dream of international cultural confluence. Art and music draw out the best in human kind.

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National Curriculum Framework, 2005 : Assessment and Evaluation Procedure

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Every nation needs to revisit its educational aims and priorities from time to time which is reflected in the curriculum framework, especially in its National Curriculum Framework.

In India, NCERT, New Delhi has been entrusted with responsibility of developing NCF. Accordingly in 1988, NCERT developed a National curriculum Framework response to National Policy of Education 1986. With change of time it was revised in 2000. The latest in this series is that published in 2005 under the chairship of Prof. Yash Pal.

Assumptions of NCF 2005

The NCF is developed on the basis of the following assumptions :

- Student diversity is an asset rather than a problem
- Students socio-economic and ethnic background is an important contributor in construction of knowledge
- It has a significant role in education
- Student is the constructor of knowledge.

The NCF asserts that evaluation should not be considered as an isolated activity, but to be integrated with the whole system of education.

Constitutionally, India is committed to ensure health, nutrition and an inclusive school environment to empower all children in their learning across differences of caste, religion, gender and ability. This impels for outlining the aims of education as under –

- Independence of thought and action
- Sensitivity to others well being and feelings
- Learning to respond to new situations in flexible and creative manner
- Pre-disposition towards participation in democratic processes
- Ability to work towards and contribute to economic processes and social change.

Keeping these aims in mind, the National curriculum Frame work, 2005 developed five guiding principles for curriculum development :

- Connecting knowledge to life outside the school
- Ensuring that learning shifts way from rote methods
- Enriching the curriculum so that it goes beyond textbooks
- Making examinations more flexible and integrating them with classroom life
- Nurturing an overriding identity informed by caring concerns within the democratic policy of the country.

These principles, however, will be realized in practice to its fullest extent, in all the elements of curriculum, viz, curricular and co-curricular activities, the transactional processes and the evaluation procedure are integrated with these principles.

The focus of present discussion is assessment and evaluation. So, I am concentrating on that part only. The purpose of evaluation is –

- To improve the teaching learning process and materials
- To assess how far the capabilities of the learners have developed
- To varied the objectives

The NCF 2005 has suggested the following guidelines to meet the above stated purposes :

Assessment at different stages

ECCE and classes I and 2 of the Elementary stage

- Assessment must be purely qualitative
- Assessment of health and physical development status is mandatory

3 to 8

Assessment tools

- Oral tests
- Written tests
- Observation Schedules
- Self evaluation

Mode of Assessment

- Qualitative
- Quantitative

9 to 12

Tools of Assessment

- Tests
- Project report
- Self evaluation

Mid-term Evaluation

- Continuous Comprehensive Evaluation
- Social Context and facilities in school
- Flexible
- Unbiased use of strength and weakness

Mode of Assessment

- Qualitative
- Quantitative

Paper Setting

- Examination and reporting

Paper Setting

- Replace prevailing text based / quiz-type questions
- Good questions to be pulled all year around from teachers, College professors teaching that subject and even from students .

For filing, categorise them according to topic / level of difficulty / competency to be evaluated and time required to solve.

These are some guidelines as well for deciding what to evaluate and how to evaluate. Emphasis of evaluation should be on higher level competencies rather than rote learning. Paper-setters and evaluators should be aware about the fact that different learners will possess different level of competencies. Learners usually face difficulties with Mathematics and English. So examinations of Mathematics and English should be conducted at more than one level. Conduct of examinations should be open, flexible and user friendly.

To conduct examinations in a right way, the examiners should be given adequate remuneration. Help of computers can be taken to protect the identity of the examiner and the examinee. There should be systems for cross-checking for mal practice and examiner consistency. Evaluation should be conducted on wider range of performance parameters. Along with absolute marks, there should be provision for grades in separate subjects and percentile ranks among the peers.

Conclusion

The role of evaluation in the academic and non academic experiences in any educational institution cannot be expressed by a one-way, mono-directional relationship. The purpose, purried and the pattern of evaluation should be determined at the time of framing the syllabus. At the same time, if we want to introduce the practice of qualitative and comprehensive evaluation procedure in our context, several changes need to be incorporated in related areas :

- Traditional mind set of the significant stake-holders; viz the parents, teachers and the management personnel need to be re-oriented. Undue weightage on academic competency should be replaced by the recognition and acceptance of multiple intelligence.
- Distinction between knowledge and information should be kept in mind while preparing the tools of evaluation
- Qualitative comprehensive evaluation will demand a lot of time and attention from the teacher. Skillful management of time in form of new approach to teaching like PEER-TUTORING CO-OPERATIVE TEACHING may be adopted. Along with lessening the burden of teaching to some extent, it will provide the added advantage of close observation of the group for leadership, co-operativeness, destructive of empathetic behaviour of the students. In today's world emotional intelligence should be given proper emphasis along with academic intelligence.
- Teachers at all levels should be exposed to training experiences on development of anambiguous criterion based best items and scoring of answer scripts. Different school education Bonds may organise workshops on reliable scoring methods with answer-scripts in school leaving Examinations with disclosing the Identity and awarded marks.

- Development of marking scheme with development of best items should be made mandatory in all school and Public examinations. Development of test items and marking scheme should go side by side.
- Conduct of these workshops should be experiential rather than informative.
- Teacher education programme needs to be revisited. What the teacher education programme needs to be revisited. What the teacher educators preach, be practised.

In conclusion, I would like to quote V. Ramdas (2003) as The negative effects due to disincentives, unclear expectations, lack of interpersonal support, absence of atmosphere for peer group learning and poor follow up and supervision greatly diminish the effects of these professional development initiatives.

Curriculum Without Burden

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Since the dawn of human history, education has continued to evolve, diversify and expand its coverage. It is need of The hour to restructure the system of education and a new direction to be shown.

Education should aim at two aspects :-

- 1) Knowledge
- 2) Creativity.

The first aim is popularly referred to as the knowledge aim intended to infuse knowledge and information in the minds of the learners. It is concerned with traditional classroom teaching-learning experience.

Knowledge is the central theme of human existence. It can be conceived as experience organised through language into the pattern of thought. Creative aim of education aims at incorporating creative spirit in the students. Children are born with creative minds but very seldom are they nurtured. Today's child are very intelligent and aroused- they know many things which we adult are unaware of. This vast resource should be tapped.

We can say that a real Kuhn revolution is taking place today – there is paradigmatic shift in education. The fact that learning has become a burden, and stress on children is an evidence of a deep distortion in educational aims and quality. To correct this distortion, the present NCF proposes four guiding principles for curriculum development:-

- 1) Connecting knowledge to life outside school.
- 2) Ensuring that learning shifts away from rote methods.
- 3) Enriching the curriculum so that it goes beyond text books. and
- 4) Making examinations more flexible and integrating them with classroom life.

Work transforms knowledge into experience and generates important personal and social values, such as self reliance, creativity and knowledge and cooperation. It also inspires new forms of knowledge and creativity.

Curriculum Renewal for Teacher Education

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The Teacher Education (TE) prepares and provides teachers for the schools, so a consonance between the principles and needs of the school-education and what the TE provides/offers is a valid demand and expectation. Teachers are the most critical input of any education-system.

The National Curriculum Framework, (NCF) – 2005 of NCERT has upgraded the school curriculum and emphasised the facilitative teaching using constructivist learning theory and problem solving.

The NCF-2005 is based on six guiding principles like–

- i. connecting knowledge to the life outside the school,
- ii. ensuring that learning shifts away from rote methods,
- iii. enriching the curriculum so that it goes beyond text-books,
- iv. making examinations more flexible and integrating them with class-room life,
- v. enabling the teachers to draw cultural experiences in the school,
- vi. enabling the teachers to link schooling with society.

To prepare teachers imbibing the above principles in TE, the main concerns are

- i. Isolation of TE and School Education (SE)
- ii. Lacking teaching aptitude and stereotype practice-teaching.
- iii. Improper attitude towards teaching (Many teachers consider teaching students as equivalent to making them pass exam with high marks. These tuition masters consider parent's and administrator's needs rather than students' need. Counselling, tutoring, orienting are never-heard words to them).
- iv. Value indifference and isolation.
- v. Absence of method of accountability (which inhibits shifting of legal accountability to moral accountability), Quality Audit and Assurance Mechanism in TE.
- vi. The role of ICT is not sincerely felt in TE,
- vii. It is yet to be felt that one-time TE is not enough in the life of a teacher [though Kothari Commission recommended 2/3 months in service TE in every five years. Acharya Rammurthy Committee (1990) iterated about specific-need based Refresher Courses for teachers]

- viii. Student-teachers are not taught about how to critically review a curriculum/ syllabus/text books.
- ix. Dilution of identity of the teacher as a professional (as has been through large scale recruitment of para-teachers, teacher selection policy in school, etc.),
- x. Day by day, deterioration of language efficiency of teachers,
- xi. Student-teachers, in most of the cases, do not understand that knowledge is interdisciplinary and continuum, and
- xii. Commercialisation of TE in past few years.

For inculcation of the above-mentioned six guiding principles in the teachers, the TE curriculum (TEC) should be based on the four pillars of learning as given by the UNESCO Delor's Report, *Learning the Treasure Within* (1996).

1. **Learning to KNOW** : There is a constant need felt for the teachers to update themselves and get involved in the life long learning process. The theory of learning to learn (Horlow), Brain-storming situations (Osborne), ICTs, etc. should be used in TE.
2. **Learning to DO** : How would the TEC be adapted to equip teachers to do the relevant type of work in schools?

UNESCO (1998) organised an international children contest in which they were asked to define a good teacher. They speak their minds as follows :

'A good teacher is a friend' – 9-years old from New Zealand,

'A good teacher listens' – 12 years old from Jamaica,

'I like a teacher who helps me think and gets answers for myself' – 9-years old from Zimbabwe,

'A good teacher is a role-model'– 12 years old from Ghana, etc.

It may, therefore, be concluded that the TEC should develop "People skills" and "Interpersonal skills" (in the teachers) which involve qualities like being kind caring, trusting, empathetic etc.

NCTE has identified 10 competency area to develop competence based and commitment oriented TE. These are contextual, conceptual, content, transactional, other educational activities, developing teaching-materials, evaluation, management, working with parents and working with community.

NCTE has further selected five commitment areas. These are : commitment to (i) the learner, (ii) the society, (iii) the profession, (iv) achieve excellence, and (v) basic human values.

3. Learning to LIVE TOGETHER : The TEC ought to instill in student-teachers an awareness of the similarities and an appreciation of pluralities. This is, especially important since there is rapid expansion of access in school education (which is termed 'massification') and NCF-2005 put emphasis on need for peace-education and harmony. The TE institutions should provide a suitable forum for dialogues and discussions (on diverse and relevant issues of national, social, historical, scientific and cultural importance) which will instill tolerance, objectivity and acceptance of other view points. Yashpal Committee (1993) opined in the same line.
4. Learning to BE : TE should equip the teachers to develop their own independent critical way of thinking and judgement, so that they can take best course of action in different circumstances in the school.

Some Introspection : Undoubtedly, there is a wide gap between 'phraseology' and 'implementation'. The term Teacher Training has been re-coined as TE, but there is more emphasis on acquisition of knowledge and skills than attitudinal change.

The following are some measures which are needed to be taken to bridge the gap between school curriculum and TEC to transact NCF-2005.

1. Contextualizing education : Indian society with its heterogeneity and plurality requires a breed of sensitive teachers. Schools having paucity of teachers, large classes, multi-grade teaching, first time learners, school lacking minimum support materials for teaching-learning, etc. are part of our social reality. Teachers are to be provided with necessary orientations, skills and attitude to face these realities.
2. Teaching for construction of knowledge (NCF-2005) : The constructivist learning theory, emerged in 1980s and 1990s, is based largely on the study of human learning in increasing realistic settings.

Constructivist learning depends on the activation of several cognitive processes in the learner during learning, including selecting relevant information (S), organising incoming information (O) and integrating incoming information (I) with existing knowledge (SOI model, Mayer 1996). Here, the teacher plays the instructional designer's role creating conducive environments in which the learner interacts meaningfully with academic material, including fostering the learner's processes of selecting, organising and integrating information (SOI). The final step in learning process is encoding in which the mental representations constructed in working memory are stored in long term memory for permanent retention.

A student-teacher should realise that student's construction of knowledge depends on what they already know, their previous experiences, how they have organised those experiences into knowledge structures such as schema and mental models, and the beliefs they use to interpret objects and events they encounter in the world.

To facilitate students to construct their knowledge, it is essential

- i. to allow children to ask questions.
 - ii. to encourage them to answer in their own words and from their own experiences.
 - iii. to encourage intelligent guessing as a valid pedagogic tool (NCF-2005).
3. Learning through interaction : In TE, learning is still individual-based and not individualised. It is essential that TEC has more provisions for group learning (as participatory process) and teaching tasks which will instill in the student-teachers a feeling of empathy, team-work, taking responsibilities and social values which are essential pre-requisites for their future as teachers.

The NCF-2005 elaborated the national values in clear terms. The need for peace education, understanding the religious sentiments (which are only exploited for political gains in recent times), promoting the meaning of harmony, etc. are inculcated through interaction with peers and community.

4. Designing learning experiences : In order for any knowledge to make any impact on the student-teachers and to get it translated into skill acquisition and attitude formation, the student-teachers should be provided with opportunities to gain experiences on their own.

The role played by practice-teaching courses (including cognitive lesson-planning which is a short diagrammatic plan of the lesson), working with community, using digital technologies and media in relevant way play a crucial role in this respect.

5. Reorganising practice teaching : The NCTE gave due weightage in the content-cum-methodology course in TEC-1978/1988 and 1998, yet practice-teaching is carried over as a monotonous 20 to 30 repetitions of similar type of rigid format-governed, exhaustive but unnecessary lesson plans, approval/correction of which is the most dreadful experience to the student-teachers. The essence of the course is thus lost.

There are few alternatives of reorganising practice teaching must involve three stage developments via (i) conceptual understanding hierarchy of sub-concepts

(covered in a topic) and behavioural objectives, (ii) specific skills and action abilities, (iii) composite professional competence.

6. Encouraging innovations in TE : ICT offers enormous potential for improving the delivery of information and knowledge-based services in all forms of education including TE, as has been predicted by UNESCO Delor's Report.

There is a need to shift to techno-pedagogical skills and methods. Apart from ICT, the use of quality teaching aids, teaching outside the four-walls of classrooms, etc. could be some of the innovations of practice teaching.

7. Changing the process of evaluation in TE : To motivate and stimulate the student-teachers to think independently and creatively, the rigidity has to be removed from curriculum transactions and evaluation pattern in TE. The possible ways of evaluation could be asking student-teachers to think aloud, to solve problem in content-area based with a viable solution and then defend their decisions, to reflect on their own learning and documents, to undertake projects/field-trips/survey-type action research and complete them. Brain-storming session, seminars, buzz-sections, debates etc. could be other base of evaluation.

8. Refresher Courses : One time TE is not enough in the life of a teacher. Besides, with globalisation, an interesting relationship has been developed between education and economy of a nation. Knowledge, skill, attitude, values imparted by academic institutions are becoming the base for creation of new products, new processes and new services. Knowledge has become synonym with the unit of currency. TE should have relevance to this new dimension emerging from economy and education relationship.

Therefore, need-specific in-service orientation/refresher courses are to be organised whenever there emerges a shift in policy/paradigm/need. Statutory organisations like NCTE, AICTE, UGC, SCERTs, DIETs, CTEs, and various other educational bodies should promote this cause.

In conclusion, may I say that since quality teaching is not an occupation but a mission, it is very difficult to put forward suggestions for a sensitive TEC.

Value of Interaction

DR. JAYASRI BANERJEE

David Hare Training College

National curriculum Framework, as a means to modernize the system of education, emphasizes on connecting knowledge to life outside school, shifting of learning from rote memorization and on interactive approaches which encourage on creative thinking and insights.

Classroom interaction is an interactive process in which teacher interacts with the class as a whole and at times, he interacts with subgroups as well as individual pupils in the classroom. Besides he also designs situations for pupil-pupil interaction, bilateral or in small groups. The interaction is directed at involving the pupils in the teaching learning process.

In the traditional teaching practices, the pupils were not responsive to interaction as they were conditioned to receiving only. Even note dictating was in practice, since the teachers believed that the pupils in the area are so backward that they cannot think. Sometimes pupils hesitated to respond due to language barrier. Moreover, they had limited content to bank upon in order to enter into participatory instructional communication in the classroom. Fourthly, seldom did they receive reinforcement in the classroom. A teacher needs to overcome all these limitations to make the interactive style of teaching operative.

Learning is an outcome of an interaction— an interaction between a teacher and a student, two or more students, a student and a computer and so on— and is often a social & active enterprise. Given that learning is an interactive enterprise and often takes place in classroom, it is desirable to create environments where instruction facilitates personal connections between what is taught and a person's prior knowledge, student's attention is maintained and they are frequently asked to act and use information, and material is periodically reviewed and retaught because students learn at different rates & in different ways.

For the teacher attempting to facilitate the interaction, the use of variety of teaching activities is important. Below is a list of activities that may be found in classroom.

- Classroom projects
- Class discussion
- Seat work
- Providing & receiving helps
- Sharing personal opinions & seeking feedback.

Excellent classroom instructor is skilled at stimulating & sustaining classroom discussion. Question, opinions, lively exchanges are important component of well functionary classroom, even a technical dissection of teaching skills highlights the importance of teacher ability to create interaction. For example, the microteaching clinic at Stanford University initially identified nine technical skills essential to effective teaching (Dunkin 1987). Seven of this are directly related to classroom interaction : fluency in asking questions, reinforcing student participation, utilizing probing questions, appropriate utilization of non-verbal cues to reduce reliance on teacher talk and utilizing interaction techniques to alleviate boredom and inattentive ness. In short, effective teaching is largely characterized by instructors who are competent interactants, skilled in interactional discourse.

Strategies for interaction

Interaction plan is likely to vary according to the objectives of different units of interaction. Instructional strategies that can be used for interaction plan are extensive : Group discussion, brain storming, symposia, role playing, problem solving tasks, cooperative learning groups, experiment, debates, dramatic performances, uses of films, video tapes, print media etc.

People learn better when they are actively involved than when they simply hear information (Bloom, 1967 ; Zayas— Baya, 1977-78). Questions asking and answering can be a useful way to encourage environment. Student can be asked about a particular concept, they can brainstorm information about the topic. For example, students can be asked to suggest some ideas about 'how to check truancy in our school'. As brainstorming does not include evaluation, all ideas are written on the black board for later consideration.

Non verbal cues

Interactive teaching involves more than verbal interaction. Through non-verbal cues, the instructor creates the relational messages that encourage or discourage interaction. Teacher attention, eye contact, facial expression and body orientation are powerful cues of acceptance & appreciation.

Different learning theory approaches favour cooperative for different reasons. Information processing theorists point the value of group discussion in helping participants rehearse, elaborate, and expand their knowledge.

Advocates of Piagetian perspective suggest that the interaction in groups can create the cognitive conflict and disequilibrium that lead an individual to question his / her understanding and try out new ideas. Those who favour Vygotsky's theory suggest that social interaction is important for learning because higher mental functions, such as

reasoning, comprehension and critical thinking originate in social interaction and are then internalized by individuals. Vygotsky believed that cognitive development occurs through the child's interaction with more capable members of the culture— adults or more capable peers.

Questioning is an effective technique that help to produce positive interactive classroom. Good question cause students to pay attention, to process information, to organize their ideas and to compose an answer, a neat summary of thinking & problem solving.

In order to make interactive style operative in the classroom a teacher should use nonjudgmental feedback techniques by moving beyond an emphasis on simple right & wrong answers. These can be done by asking questions, plausible contradictions and request for examples to help students to evaluate their own work. When the students realize that the teacher is trying to understand what a student is thinking, rather than trying to find out what the students do not know, the emotional climate of interaction become more positive.

A supportive classroom climate encourage greater interaction, participation & involvement. Cooper (1984) outlined 12 suggestions to create participation & supportive classroom climates :

1. Accept & develop student's ideas.
2. Accept & develop student's feelings.
3. Praise rather than criticize.
4. Encourage.
5. Insure a level of success for all students.
6. Listen.
7. Allow for pupil talk.
8. Abide by the rules for effective feedback.
9. Metacommunicate.
10. Accept pupil mistakes.
11. Don't seek instant closure.
12. Be authentic.

Interactive teaching is a powerful instructional strategy that, when used appropriately, can result in positive instructional outcome. Students interact face-to-face and play different roles in group learning. They may play the role of encourager (encourages shy students to participate), Praise (shows appreciation of others contribution), Couch (help

with academic content), Checker (check the group's understanding), Recorder (writes down the ideas, decisions & plans), Reflector (keeps group aware of programs & lack of progress).

Effective teachers must have a wide range of activities & strategies for interacting with students.

- Students attention is under the control of the teacher.
(Many factors in the classroom influence student's attention. Eye catching or startling displays or actions can draw attention at the beginning of the lesson. Moreover bright colours, underlining, calling students by names, variety in tasks and teaching methods, changes in voice level or pacing can all be used to gain attention, as the first step in learning is paying attention).
- Relationship or connection between what is being taught and the prior knowledge is established.
(As individual constructs his understanding in the light of his exclusive network of prior knowledge.)
- Material is presented in a manner that elicits active enquiry & interest.
(By presenting students with an interesting problem, one that students discuss among themselves— interest & relevance can be created.)
- Guidance is provided as by teacher as students interact with new material or tasks.
(If the teacher observes students not recognizing some relevant aspects of the concept, the teacher must find some way to guide the students.)
- Students are asked to demonstrate what they are learning. Listening to students explanation for their answers, gives guidance to the teacher as to what kinds of activities might be most useful to modify their understanding.
- Their responses are assessed and a feedback is provided about the quality of students learning.
(Thus students also learn to assess the quality & clarity of their thinking)

To accomplish this sequence of interaction with students & to enhance the efforts of instruction, students often benefit from interaction in how to study. All these are the key processes through which learning occurs.

Participation for All Children

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Introduction

Education is regarded as the potential instrument of social transformation and important means of national development. But now in a developing country like India, there is a remarkable explosion of student enrolment. As a result many problems have entered into the educational system. On the other hand globalization and science & technological growth have totally revolutionised education. Specially, globalisation demands quality in each and every walk of human life and education is not exception to this. Again, the 21st Century needs changing schools to change the world. So, modern teachers should be facilitators of knowledge instead of being its transmitters and should develop skills of learning to learn.

The progress and development of any nation depends to a great extent on quality of the citizens and it further depends on the quality of education i.e. the system of education of that nation. The Dakar Framework for Action also declared that access to quality of education was the right of every child. So, the latest paradigms are :-

- (i) Education for all and
- (ii) Education is a matter of human right.

"ALL" in "Education for all (EFA)" includes right to education for all learners irrespective of individual learning needs, abilities and interests. It expands the idea of integration in the context of special education and also of regular schools in all possible aspects. Here "All" refers to normal persons, deprived persons (ie. SC, ST, OBC and women) and Children with special needs.

Problem

The present paper's purpose is to explore the potential alternative method and practice in enhancing students enrolment, teaching-learning process, course outcomes, professional development of teachers and is to make recommendations on effective teaching with various components. Again the present problem is heightened due to huge gap between the policies and actual practices.

Positive Development in Attainment of EFA

- 1) The constitution of Independent India has made the provision of free and compulsory education for all children between the age of 5 to 14 years. So, the provision of "Education for all" has been accepted as the national goal.

- 2) Hike in GDP (economic performance) from 5.7% (1980) to 8% in the 10th plan.
- 3) Increase in literacy rate for 52% (1981) to 65% in 2001.
- 4) Population growth has declined below 2%.

But it is regretted that still now our national goal has not been achieved, because a large part of population between the age of 5-14 years of age belonging to different categories such as SC, ST, OBC, economically & backward women section and disabled persons, is out of regular school entry. So, participation for all children is regarded as the potential important of national development. Participation of all children means achieving education for all that helps all children to learn together regardless of their difficulties and differences they may have.

Programmes

Happily our government has taken up the matter with all seriousness and has put in its endeavour in the following direction :-

- 1) Sarva Shiksha Abhiyan (SSA) – A Programme of universal elementary education.
- 2) Intensive planning for Early childhood care and education (ECCE). The existing ECCE programmes include :-
 - i) Integrated Child Development Scheme (ICDS)
 - ii) Scheme of assistance to voluntary organisations for conducting Early childhood Education (ECE) centres.
 - iii) Balwadis and day care Centres run by voluntary agencies with Government's assistance.
 - iv) Pre-primary schools run by the state Government Municipal Corporations and other governmental and non-government agencies.
 - v) Maternal and child health services through primary health centres and sub centres and other agencies.
- 3) Community participation in elementary education in which school mapping is mandatory.
- 4) Gender-specific programmes.
- 5) Mid-day meal (Education guarantee scheme)
- 6) Alternative initiation in Education programme i.e.
 - a) Non-formal education
 - b) Adult high school.
 - c) School for the labourers
 - d) Social welfare units of the Government
 - e) Education for the children with special need.

Suggestive Approach

The suggestive approaches are given below for the participation of all children :-

- 1) Reviewing the Curriculum.
 - 2) Revising assessment process.
 - 3) Decentralised administrative structure :- Improvement of the quality of education through decentralised administration i.e. DIE, DPEP, CRC and also to provide local academic support through peer groups at block levels.
 - 4) Strengthening teacher training programme:- Proper teacher training to equip necessary skills and to prepare competent teachers.
 - 5) Teacher should cover the vast area of the curricula in school hours out, and also she/he has the duty to pick-up below average students to the average level.
 - 6) Teachers can use "Constructivism model" for quality teaching. Constructivism seems to be a major rethinking of teaching and learning which will have a lasting impact on both curriculum and instruction.
 - 7) Proper assessment should be a key component and integrated aspect of a good curriculum design.
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A Brief Report on National Curriculum Framework – 2005

By
DR. SMRITI KANA MAJUMDAR

NCERT has prepared and published a new document called 'National Curriculum Framework for School Education' in 2005, in order to establish a National system of Education, characterised by certain core values and transformative goals which might be consistent with the Constitutional values of India.

We organised a Seminar on this National Curriculum Framework – 2005 (NCF-2005) as a CTE Programme. We selected a few topics from the NCF-2005 for discussion, keeping in mind the main thrust area of NCF-2005 – 'Learning without burden'.

Well known educationist – DR. RANJUGOPAL MUKHERJEE was the Chief Guest of this Seminar. He initiated his discussion by giving a brief historical background of the NCF-2005, starting from 1981. In the year 1985 a preliminary structure of Core curriculum was developed by NCERT, by removing the undesirable disparities in school education in different States. Then came the New Education Policy of 1986. On the basis of this Policy NCERT published a modified curriculum framework under the title 'National Curriculum of Elementary and Secondary Education' in 1988. By the time there was a change of Govt. and BJP came into power and the Curriculum Framework of 1988 was again overhauled with new ideological components and a New NCF was presented in 2001. Later on UPA Govt. came into power and on the demand of this Govt. NCF-2005 was framed by NCERT by replacing the NCF-2001.

He then highlighted the main features of NCF-2005 which included extra emphasis on compulsory education of children in the age group 6-14 years. He praised the idea of education for peace, value education and importance given on the socio-economic condition of the learners.

The second speaker was DR. SITANSU RAY, a retired professor of Rabindra Sangit, Sangit Bhavan, Visva Bharati. His topic of discussion was Art Education. He talked about Art Education in a general way. His discussion was mainly centered around Music education. He discussed Tagorean concept of Music teaching. Before the preparation of NCF-2005 by NCERT the UGC recommended music education from the very school level so that Colleges and Universities can admit promising students.

He appreciates the NCF-2005 for giving more importance to music education in school level. He thinks it is a well-thought Framework which starts with well-understood Tagorean concepts of 'creative spirit' and 'generous joy' inherent in children. His own view is that music education should start from pre-primary level and should be taught

compulsorily upto class eight and then they can go for further music studies in H.S., B.A. and M.A. levels.

DR. SUBHALAKSHMI NANDI of Department of Education, Kalyani University was the next speaker. She spoke on the subject 'Constructivist Learning Situation'. First she explained what is meant by 'Constructivist Learning Situation'. Constructivism represents a paradigm shift from education based on Behaviorism to education based on Cognitive theory. According to Constructivist Psychology learner is viewed as constructor of knowledge. It is a problem-based learning. In the process of solving the problem with the help of learners own experience and by active participation, the students develop learning. Students conceptualise the situation first individually and then share this knowledge with other students and it creates a social situation and leads to group learning or collaborative learning. Constructivist Learning (CLO) develops critical thinking and complex reasoning skills of the learners. CL is a self-regulated learning where learner is an initiator of the learning process.

Then she went on to explain that Constructivist learning needs Constructivist Teaching (CT). In CT, teacher is a facilitator. He creates the CL situation and guides the students.

In her opinion CL situation approach can be incorporated in our schools in 45-50 minute class periods to teach a particular concept or skill.

DR. DEBJANI SENGUPTA, Deptt. of Education, Calcutta University, was the fourth speaker. Her assigned topic was 'Evaluation and Assessment'. She talked about the purposes of evaluation and the guidelines of NCF-2005 to meet its objectives. Then she discussed the nature of evaluation at different stage of education as outlined in the NCF-2005. More emphasis is given on quality of assessment, comprehensive assessment, continuous assessment and self-assessment by the students.

Paper setting is an important part of evaluation. Teacher must know what to evaluate, how to evaluate and the competency level of the students. Evaluation should be conducted on wider range of performance parameters. Teachers should be given training how to score answer scripts. Along with absolute marks there should be provision for grades and percentile ranks among the peers.

To bring about these changes DR. SENGUPTA thinks that there is need of re-orientation of mind-set of the teachers, parents and the management personnel. Time factor should be taken into account as qualitative and comprehensive assessment demand lot of time and attention from the teacher. She talked about peer-tutoring and co-operative teaching to have close observation of the group by the peers.

The fifth speaker was DR. RITA SINHA, Deptt. of Education, Calcutta University. She gave lecture on the subject 'Learning without Burden'. First she went through the guiding

principles of the NCF-2005. These Principles are – connecting knowledge to students life, reducing rote memorization, enriching curriculum beyond text-books, making examinations more flexible and integrating them with classroom life, enabling the teachers to draw cultural experiences in the schools and linking schools with the society. She thinks that if these principles can be followed properly in school teaching the burden of learning can be reduced to a great extent. In this connection Dr. Sinha gave added emphasis on nurturing the child's 'creativity' to reduce the burden of learning.

The last speaker was Professor TAPAS KUMAR MITRA, Officer-in-charge, Institute of Education (P.G.) for Women, Chandannagar, Hoogly. His topic of discussion was 'Teacher Education'.

Prof. Mitra, first, gave an overview of the recommendations of various Commissions and Committee regarding teacher education. These included Radhakrishnan Commission, Kothari Commission, Chattopadhyay Commission and Yashpal Committee. Professor Mitra then explained how the guiding principles of NCF-2005 can be incorporated in teacher education. He also explained the multi-farious problems in preparing the teachers for adopting the Constructivist learning theory emphasised in the NCF-2005.

For incorporating the guiding principles in teacher education Prof. Mitra Suggested that teacher education should be based on four pillars of learning given by the UNESCO Delors's Report (1996) i.e. 'learning to know', 'learning to do', 'learning to live together' and 'learning to be'. Prof. Mitra then discussed the measures suggested in the NCF-2005 to bridge the gap between school curriculum and the curriculum for teacher education. These measures are – contextualization of education according to socio-economic condition, and change of mind set to focus on development of new values; e.g. broadmindedness, peace education, communal harmony, etc.

In NCF-2005 there is paradigm shift in teaching-learning process. As stress is on learning through interaction, designing learning experiences, re-organisation of practice teaching, encouraging innovation in teacher education, change in the process of evaluation, there is need of inservice refresher/orientation courses.

Professor Mitra concluded his lecture by saying 'teaching is a mission, not an occupation, hence a teacher needs to update himself/herself with changing time.

Seminar on N C F – 2005 : Participants' opinion

Topic : Rethinking of Music Education in Tagorean Lines — Dr. Sitansu Ray

Opinion : By Prof. Sutapa Thakur

মনোবৈজ্ঞানিক ও শারীরবৃত্তীয় দিক থেকে সংগীতের প্রভাব/প্রয়োজনীয়তা আন্তর্জাতিকভাবে স্বীকৃত ও বহু আলোচিত। কিন্তু National Curriculum-এর ক্ষেত্রে তার কোনও প্রায়োগিক দিক সেভাবে রাখা হয়নি। Physical Education-এর প্রয়োজনীয়তা স্বীকার করে নিয়ে curriculum-এ যেভাবে গুরুত্ব দেওয়া হয়েছে, সংগীতের জন্য সে রকম কোনও স্থান পৃথকভাবে রাখা হয়নি। আমাদের সমাজজীবনে সংগীতের প্রভাবের কথা মনে রাখলে শিক্ষাক্ষেত্রে এর প্রয়োগের প্রসঙ্গটি বাদ দিয়ে কোনও curriculum তৈরি করা কি যুক্তিসঙ্গত?

Topic : Assessment and Evaluation Procedure — Dr. Debjani Sengupta

Opinion : By Prof. Priti Chaudhuri

Prof. Nagarjun Bharadwaj

Prof. Kakali Mukhopadhyay

Prof. Mili Das

As per the third group members, emphasise should be given on self-assessment and mid-term assessment. In this connection formative evaluation is an important and effective approach, which can be adopted by the teachers in their classroom teaching-learning process.

Topic : Curriculum Renewal for Teacher Education — Prof. Tapas Mitra

Opinion : By Prof. Mandira Mukherjee

Prof. Kaushik Chatterjee

Prof. Shelley Datta

The NCF-2005 emphasised the facilitative teaching using constructive learning theory and problem solving.

Following measures are needed to be taken to bridge the gap between school curriculum and TEC to transact NCF-2005:

1. Contextualising education
2. Teaching for construction of knowledge
3. Learning through interaction
4. Designing learning experience
5. Reorganising practice teaching
6. Encouraging innovations in teacher education
7. Changing in the process of evaluation
8. Refresher course

Topic : **Learning without Burden — Dr. Rita Sinha**

Opinion : By Prof. Bishnupada Bera

Prof. Sagar Mondal

Prof. Subhra Sinha Roy (Ghosh)

ডঃ সিন্হার এ বিষয়ে বক্তব্য অত্যন্ত সহজ এবং সময়োপযোগী। তিনি তাঁর উপস্থাপিত শিরোনামে বারংবার গুরুত্ব দিয়েছেন শিক্ষার্থীর সৃজনধর্মী দক্ষতার উপর এবং তার চিন্তনের নতুনত্বের উপর। উপরোক্ত বিষয়দ্বয় নিঃসন্দেহে প্রশংসনীয় কিন্তু মূল্যায়নের ক্ষেত্রে তা যাতে অধিক মাত্রা পায় সে ব্যাপারটার উপরও আলোকপাত করা দরকার। তা না হলে শিক্ষার্থী বা শিক্ষক কেউই এই প্রক্রিয়ার উপর আস্থা রাখতে পারবেন না অথবা উৎসাহ হারিয়ে ফেলবেন।

পাঠ্যক্রমে নতুন বিষয় সংযোজন যুগ ও মানসিকতার পরিপ্রেক্ষিতে অবশ্যই স্বীকার্য। একই সঙ্গে শিক্ষার্থীর সামর্থ্য এবং গ্রহণক্ষমতার কথাটাও বিবেচিত হওয়া দরকার। আর্থ-সামাজিক পরিবেশটাকেও কোনওভাবে অস্বীকার করা উচিত হবে না।

উপরিলিখিত বিষয়গুলিকে স্মরণে রেখে NCF-এর বাস্তবায়নে অগ্রসর হওয়া দরকার।

Topic : **Constructivist Learning Situation** — *Dr. Subhalaksmi Nandi*

Opinion : By Prof. Jayasri Banerjee

Prof. Swati Sarkar

Prof. Srijib Kumar Patra

Prof. Chandrima Mitra

In this age of globalisation and modernisation the students are restless and they seek variety and novelty in teaching-learning situation. The constructivist learning situation approach offer an opportunity to the students to participate actively and spontaneously in the classroom-teaching learning situation. As students are involved directly in the teaching-learning situation they share their ideas and concepts with other group member. This type of learning approach will give the students a sense of satisfaction and learning will be a joyful experience.

The impact of constructivist learning situation will be reflected in our evaluation system. Necessary modifications are to be made in our traditional evaluation systems. There should be flexibility in assessing students' performance.

Adoption of this constructivist learning approach requires the training of teachers as regard to provide such situation where multiple solution is possible.

It is also to be mentioned that the school subjects and all the aspects of a particular topic can not be covered by this approach.

Another point to note is that in our over-crowded classroom and time-bound syllabus it would be difficult to introduce this constructivist learning situation approach but we may give a try.

CTE ORIENTATION PROGRAMME

Subject : National Curriculum Framework

Dated : 20th September '06

Sl. No.	Name of Participants	Name of School
1.	Srijib Kumar Patra	Calcutta Girls' B. T. College
2.	Sila Mukherjee	Institute of Education for Women, Chandannagar
3.	Sampa Daw (De)	Institute of Education for Women, Chandannagar
4.	Priti Chaudhuri (Sen)	Institute of Education for Women, Hasting's House
5.	Kakali Mukhopadhyay	Scottish Church College
6.	Nagarjun Bharadwaj	David Hare Training College
7.	Swati Sarkar	St. Xavier's College
8.	Mandira Mukherjee	St. Xavier's College
9.	Kaushik Chatterjee	Satyapriya Roy College of Education
10.	Bishnupada Bera	David Hare Training College
11.	Sagar Mondal	Govt. Training College
12.	Jayasri Banerjee	David Hare Training College
13.	Chandrima Mitra	Scottish Church College
14.	Subhra Sinha Roy	Govt. College of Education, Banipur
15.	Sutapa Thakur	Govt. College of Education, Banipur
16.	Partha Chattopadhyay	David Hare Training College

